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# HARVARD MEDICAL SCHOOL

AND

SCHOOL OF DENTAL MEDICINE

1966–1967

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# HARVARD MEDICAL SCHOOL

25 SHATTUCK STREET
BOSTON · MASSACHUSETTS 02115

AND

# SCHOOL OF DENTAL MEDICINE

188 LONGWOOD AVENUE
BOSTON · MASSACHUSETTS 02115

1966—1967

WITH AN ANNOUNCEMENT FOR 1967–1968

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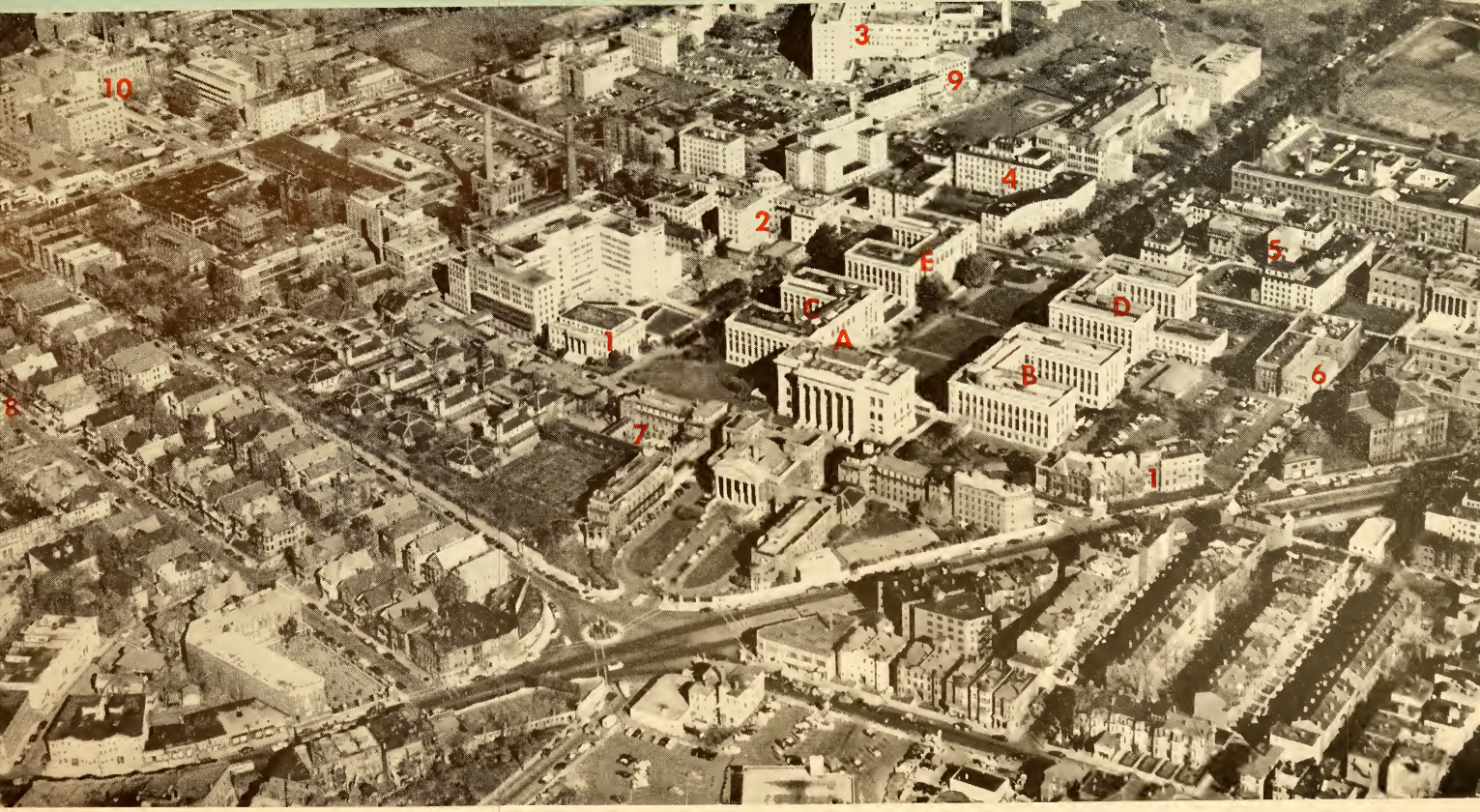


A, B, C, D, E. Harvard Medical School buildings. 1. Harvard School of Public Health. 2. Children's Hospital. 3. Beth Israel Hospital. 4. Vanderbilt Hall. 5. Boston Lying-in Hospital. 6. Harvard School of Dental Medicine. 7. Peter Bent Brigham Hospital. 8. Massachusetts Mental Health Center. 9. Judge Baker Guidance Center. 10. New England Deaconess Hospital.

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# HARVARD MEDICAL SCHOOL

## Academic Calendar for 1966–1967

| | | |
|---|---|---|
| *Monday* | *July 4, 1966* | Independence Day: a holiday. |
| *August 22–September 11* | | Vacation for Class of 1967. |
| *Monday* | *September 5* | Labor Day: a holiday. |
| *Friday* | *September 9* | Registration Day for second and third year classes. |
| *Monday* | *September 12* | Academic year begins for second year class. Introduction to the Clinic begins for third year class. Registration Day for fourth year class (Class of 1967). Principal Clinical Year continues for Class of 1967. |
| *Friday* | *September 16* | Registration Day for first year class. |
| *Monday* | *September 19* | Academic year begins for first year class. |
| *Wednesday* | *October 12* | Columbus Day: a holiday. |
| *Friday* | *November 11* | Veterans' Day: a holiday. |
| *Thursday* | *November 24* | Thanksgiving Day: a holiday. |
| *Saturday* | *December 3* | Introduction to the Clinic ends for third year class (Class of 1968). Principal Clinical Year ends for Class of 1967. |
| *Monday* | *December 5* | Principal Clinical Year begins for Class of 1968. Reading Period begins for Class of 1967 (fourth year class). |
| *December 18, 1966–January 2, 1967* | | Recess for fourth year class. |
| *December 22, 1966–January 4, 1967* | | Recess for first and second year classes. |
| *Tuesday* | *January 3* | Elective Period begins for fourth year class. |
| *Tuesday* | *January 17* | Second half year begins for second year class. |
| *January 30–February 4* | | Examination period for first year class. |
| *Monday* | *February 6* | Second half year begins for first year class. |
| *Wednesday* | *February 22* | Washington's Birthday: a holiday. |
| *February 26–March 5* | | Recess for Class of 1968. |
| *Monday* | *April 3* | Last day for filing application for the degree of M.D. in June 1967. |

| | | |
|---|---|---|
| | | Last day for filing application for scholarship for 1967–1968. |
| *April 16–23* | | Recess for first and second year classes. |
| *Friday* | *May 26* | Alumni Day. |
| *Saturday* | *May 27* | Class Day for the Class of 1967. |
| *Tuesday* | *May 30* | Memorial Day: a holiday. |
| *June 5–10* | | Examination period for second year class. |
| *Saturday* | *June 10* | Second half year ends for first year class. |
| *Thursday* | *June 15* | Commencement. |

## Academic Calendar for 1967–1968

| | | |
|---|---|---|
| *Tuesday,* | *July 4, 1967* | Independence Day: a holiday. |
| *August 21–September 10* | | Vacation for the Class of 1968. |
| *Monday,* | *September 4* | Labor Day: a holiday. |
| *Friday,* | *September 8* | Registration Day for second and third year classes. |
| *Monday,* | *September 11* | Academic year begins for second year class. |
| | | Introduction to the Clinic begins for third year class. |
| | | Registration Day for fourth year class (Class of 1968). |
| | | Principal Clinical Year continues for Class of 1968. |
| *Friday,* | *September 15* | Registration Day for first year class. |
| *Monday,* | *September 18* | Academic year begins for first year class. |
| *Thursday,* | *October 12* | Columbus Day: a holiday. |
| *Saturday,* | *November 11* | Veterans' Day: a holiday. |
| *Thursday,* | *November 23* | Thanksgiving Day: a holiday. |
| *Saturday,* | *December 2* | Introduction to the Clinic ends for third year class (Class of 1969). |
| | | Principal Clinical Year ends for Class of 1968. |
| *Monday,* | *December 4* | Principal Clinical Year begins for Class of 1969. |
| | | Reading Period begins for Class of 1968 (fourth year class). |
| *December 17, 1967–January 1, 1968* | | Recess for fourth year class. |
| *December 21, 1967–January 3, 1968* | | Recess for first and second year classes. |

| | |
|---|---|
| *Tuesday, January 2* | Elective Period begins for fourth year class. |
| *Tuesday, January 16* | Second half year begins for second year class. |
| *January 29–February 3* | Examination period for first year class. |
| *Monday, February 5* | Second half year begins for first year class. |
| *Thursday, February 22* | Washington's Birthday: a holiday. |
| *February 25–March 3* | Recess for the Class of 1969. |
| *Monday, April 1* | Last day for filing application for the degree of M.D. in June 1968. |
| *April 14–21* | Recess for first and second year classes. |
| *Thursday, May 30* | Memorial Day: a holiday. |
| *Friday, May 31* | Alumni Day. |
| *Saturday, June 1* | Class Day for Class of 1968. |
| *June 3–8* | Examination period for second year class. |
| *Saturday, June 8* | Second half year ends for first year class. |
| *Thursday, June 13* | Commencement. |

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This Board is commonly known as the Corporation

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### Fellows

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Richmond Keith Kane, A.B., LL.B.
Thomas Stilwell Lamont, A.B.
Francis Hardon Burr, A.B., LL.B.
Albert Lindsay Nickerson, S.B.

### Treasurer

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---

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Sargent Kennedy, A.B., S.M., M.B.A.

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Paul Cashman Reardon, A.B., LL.B., S.J.D. (hon.), Jur.D. (hon.), LL.D.
Nathanael Vining Davis, A.B.
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Augustin Hamilton Parker, Jr., A.B., LL.B.
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Gerard Piel, A.B., S.D. (hon.), Litt.D., L.H.D., LL.D.

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Henry Jacob Friendly, A.B., LL.B., L.H.D., LL.D.
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Lammiot du Pont Copeland, S.B., LL.D., D.Sc. (hon.), H.H.D.

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Henry Chauncey, A.B., S.D. (hon.)
Paul Henry Nitze, A.B., LL.D.
Clarence Douglas Dillon, A.B., LL.D.
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### Assistant Secretary of the Board of Overseers

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† *Chairman.*
‡ *Secretary.*

# HISTORY AND ORGANIZATION OF THE HARVARD MEDICAL SCHOOL

On September 19, 1782 the President and Fellows of Harvard College adopted a report by President Joseph Willard and former Acting President Edward Wigglesworth embodying a plan for a medical school. This action was followed on November 22, 1782 by the appointment of Dr. John Warren of Boston as the first Professor of Anatomy and Surgery. Shortly thereafter Dr. Benjamin Waterhouse was appointed Professor of the Theory and Practice of Physic. The original faculty was completed in May, 1783, when Dr. Aaron Dexter was named Professor of Chemistry and Materia Medica.

The Harvard Medical School, now nearing the close of its second century of uninterrupted teaching dedicated to the treatment and prevention of the ills of man, was the third medical school to be established in the United States. The first school was organized in 1765 in the College of Philadelphia (now the University of Pennsylvania), the second in 1767 in King's College (now Columbia University).

The first degrees of Bachelor of Medicine awarded by Harvard University were conferred in 1788. Until 1811, the degrees of Bachelor of Medicine and Doctor of Medicine were conferred, the former on graduation from the Medical School, the latter on examination at least seven years after graduation. In 1811 the degree of Doctor of Medicine was granted to graduates of that year and to earlier graduates who had not been admitted to it. All graduates since 1811 have received the degree of Doctor of Medicine.

During its long history, the Medical School has occupied seven different sites. The first classes were held in the basement of Harvard Hall in the Harvard College Yard. Later they were transferred next door to Holden Chapel, a building which was

originally the College Chapel but through the years has served as a carpenter shop, a chemistry laboratory, a museum, and is now the home of the Harvard Glee Club. To be close to such hospital facilities as might be developed in Boston, the Medical School, in 1810, was moved out of the Yard to quarters at 49 Marlborough Street (now 400 Washington Street) in Boston. Six years later, the Medical School occupied the first structure built especially for its use, located on Mason Street in Boston. At this time, and for a period of 42 years thereafter, the School bore the title of "The Massachusetts Medical College of Harvard University."

In 1847, new quarters were established on North Grove Street opposite the Massachusetts General Hospital and here the School remained until 1883, when the move was made to 688 Boylston Street and a building that was expected to be the "home of medicine for generations." The School's vigorous growth soon made these quarters inadequate. Accordingly, the five marble buildings that today form the Longwood Avenue Quadrangle were erected. At their dedication on September 25, 1906, Dr. Charles W. Eliot, President of the University, in his acceptance address, described them as: "The largest single addition to the resources of the University which has ever been placed in the hands of the Corporation since it received its charter in 1650."

These buildings were built on 11 acres of an original 26 acre tract, the remaining 15 acres being reserved for the hospital facilities that, it was expected, would be built around the School. Four hospitals and the Harvard Schools of Dental Medicine and Public Health are now located in this general area.

Prior to 1906 most clinical teaching was carried on in the Massachusetts General and Boston City Hospitals. Opportunities for clinical teaching and investigation have increased greatly since the Longwood Quadrangle was established, through the new hospitals surrounding the School and affiliated with it.

## BUILDINGS

The Administrative Building (A), with 65,000 square feet of floor space, contains the Faculty Room, the Administrative Offices of the Medical School, the Alumni Office, the Courses for Graduates Office, the Warren Anatomical Museum, the News Office for the Medical Area, and the teaching laboratories for Histology and Neuroanatomy.

The laboratory buildings, designated by the letters B, C, D, and E, were all constructed on the same general plan — two parallel wings united at the front by an amphitheatre with a seating capacity of two hundred and fifty. To keep pace with present day requirements, the original facilities are continually being adapted, remodeled and even rebuilt while preserving the outside walls. In Building B, added research laboratories and teaching facilities have replaced the amphitheatre. Both the smaller rooms and the laboratories are designed on a unit system which greatly simplifies changes required in suiting these rooms to the future needs of departments. The amount of floor space varies considerably in each of the four buildings.

Building B accommodates the Departments of Anatomy, Neurobiology and Pharmacology. In this building each wing has five floors and a total floor space of 132,000 square feet.

Building C provides space for the Departments of Biological Chemistry and Physiology, and the Office of the Division of Medical Sciences. In this building there are four floors in one wing and five floors in the other. The building has a total floor space of 111,525 square feet.

Building D is occupied by the Departments of Bacteriology, Pathology, Preventive Medicine, the Division of Medical Sciences, Laboratory, the Biophysics Laboratory, and laboratories of the Department of Medicine. In this building each wing has five floors, with a total floor space of 91,500 square feet.

Building E houses the Department of Tropical Public Health of the School of Public Health and teaching facilities for Gross Anatomy. A new addition provides quarters for Surgical Re-

search. There are three floors in one wing and four floors in the other, with a floor space of 62,000 square feet.

Vanderbilt Hall, the student dormitory, was opened in 1927.

The Francis A. Countway Library of Medicine described on page 19 was opened in 1965.

## SCHOOL OF DENTAL MEDICINE

Founded in 1867, the Harvard School of Dental Medicine was the first university affiliated school for dentistry in the United States. The School, a responsibility of the Faculty of Medicine since 1899, offers a four year course that leads to the degree of Doctor of Dental Medicine.

During the first two academic years the courses of instruction are nearly identical with those of the Medical School. The third and fourth years are under the direct supervision of the staff of the School of Dental Medicine. The recipient of the degree of D.M.D. from the School of Dental Medicine is well prepared to meet State Board requirements for license to practice dentistry. Graduates are also ready for the advanced study and experience recommended for any of the specialties of dentistry.

Access to the research laboratories of the School in the elective time during the third and fourth years permits unusual training for those having dental research in mind as a career.

The requirements for admission parallel those of the Medical School, except that the Dental Aptitude Test is required in place of the Medical College Admission Test. Qualified students and graduates of approved medical schools who wish to specialize in dentistry may be admitted to the School of Dental Medicine with advanced standing.

*A brief description of the program of the School of Dental Medicine can be found on page 315. Full details are available in the Dental School's catalogue.*

## LIBRARIES

The Francis A. Countway Library of Medicine, opened its doors to readers in June 1965. Located at the Medical School, it combines the resources and services of the Harvard Medical Library and the Boston Medical Library. Among libraries serving medical schools, it is among the largest in the country. Its recorded holdings number 408,000 volumes, and it receives 4,300 different periodicals. The Countway Library is open:

8:00 a.m. to 11:30 p.m. weekdays
9:00 a.m. to 5:00 p.m. Saturdays
2:00 p.m. to 11:30 p.m. Sundays

In addition to its holdings of current books and periodicals, the Countway Library has extensive collections of historical materials, dating from the 15th Century. Its History of Medicine Department provides modern facilities for the use of these books and other rarities.

For the convenience of the several departments of the School, collections of books and journals are maintained in a number of other buildings. Among the more important convenience collections are:

Anatomy Library (Building B, 3d floor)
Bowditch Library of Physiology and Biochemistry (Building C, 3d floor)
Library of Dental Medicine (188 Longwood Avenue)
Lucien Howe Library of Ophthalmology (at the Massachusetts Eye and Ear Infirmary)

All members of the University may borrow from the College Library at Cambridge. Messenger service is provided daily from the College Library and various other University Libraries.

The Boston Public Library issues cards to permanent and to temporary residents of Boston. Others may obtain cards upon payment of a small fee. Other libraries of the Boston area, notably those of the Massachusetts Institute of Technology, add to the total book and periodical resources available to students.

The librarian is Ralph T. Esterquest, and Earle M. Chapman is chairman of the Library Committee of the Faculty.

## WARREN ANATOMICAL MUSEUM

The Warren Anatomical Museum was founded in 1847 by John Collins Warren, of the College Class of 1797, Adjunct Professor of Anatomy and Surgery from 1809 to 1815, Hersey Professor of Anatomy and Surgery from 1815 to 1847, Professor *Emeritus* from 1847 to his death in 1856, son of John Warren, the first Hersey Professor of Anatomy and Surgery.

The Curator of the Museum is Dr. Don W. Fawcett, Hersey Professor of Anatomy.

The collection comprises several thousand specimens illustrating both normal and pathological anatomy. These include dissections, skeletons, viscera, and the Dwight Collection illustrating skeletal variations and cross sections of bones. There is a growing number of gross neuropathological specimens and an extensive series of total brain sections prepared under the direction of the former Curator, Dr. Paul I. Yakovlev. These are available for study by qualified graduate students upon application to the Department of Neuropathology.

Also housed in the Museum are the records of the Longitudinal Studies of Child Health and Development conducted between 1929 and 1960 by Dr. Harold C. Stuart, Professor *Emeritus* of Maternal and Child Health at the Harvard School of Public Health. These records pertain to 134 children followed from birth to their eighteenth year and 175 other children followed from birth for shorter periods. The data include health histories, radiographs of skeletal development, body measurements, measurements of intelligence and observations on the family and home environment. Permission to use these records for research purposes may be obtained through the Department of Maternal and Child Health, Harvard School of Public Health.

## HOSPITAL FACILITIES

### Beth Israel Hospital

Founded in 1916 "to give medical and surgical aid and care, dispensary and outpatient service to the sick and disabled of any race, creed or color, and to carry on such educational, philanthropic and scientific activities and functions as are a part of efficient modern hospital service," this general hospital contains 368 beds and 62 bassinets, all used for teaching. Among the major teaching hospitals of Harvard Medical School, it offers a wide range of services, broadly categorized under medicine, surgery, obstetrics-gynecology, pathology, pediatrics, psychiatry and radiology, each under the direction of full-time Faculty Members. There are many well equipped laboratories for clinical investigation and basic research, modern seminar and lecture rooms, and a convenient medical library, all available to students in the Medical School. In 1966, approximately 12,000 inpatient admissions and 2,300 deliveries accounted for 120,000 patient days of hospital care. Interest in community medicine is manifest through an Outpatient Department (60,000 annual visits), Emergency Ward (20,000 annual visits), Home Care Program (13,000 annual patient days), and Child Care Program oriented toward 400 families in Roxbury and elsewhere. There is also a close relationship with the Hebrew Rehabilitation Center for Aged, where the medical problems of over 500 elderly citizens fall within the purview of Beth Israel Hospital.

### Boston City Hospital

This hospital with all its divisions contains 1,180 beds, including 85 bassinets for newborn and 200 beds for infants and children. Over 300 are available to the teaching units of the Medical School. The Second and Fourth Medical Services, the Fifth Surgical Service, the Neurological and Neurosurgical Services are under the direction of Professors of the Harvard Medical School, and in

addition there are other specialties open to students. In the Outpatient Department and Accident Floor there were 514,228 patient visits during the year 1965.

The Thorndike Memorial Laboratory, established in 1923 for medical research, includes a metabolism ward and is an integral part of the Harvard Medical Unit. It is an internationally known center of medical investigation in the treatment of blood disorders, infectious diseases and disorders of the liver, kidney, thyroid and heart. The Sears Surgical Laboratory, established in 1955 as part of the Harvard Surgical Unit, is associated with the Fifth Surgical Service under the direction of the Professor of Surgery who is Head of that Service. It provides a modern amphitheatre, conference rooms, animal quarters, library, and laboratories for surgical research. The Departments of Neurology and of Pathology also maintain active research laboratories. In addition there are well-equipped service laboratories for pathology, chemistry, metabolism, and immunology. Four amphitheatres and various conference rooms are used in student instruction. The hospital maintains an admirable general working library and two special libraries.

## Boston Hospital for Women

The Boston Hospital for Women was formed in 1966 by merger of the two Harvard-affiliated hospitals specializing in the care of women. These were the Boston Lying-in Hospital and the Free Hospital for Women which have been re-named the Lying-in Division and the Parkway Division.

The Lying-in Division, located at 221 Longwood Avenue, has 174 beds. Approximately one-third are on the ward service and an increasing number of private beds are also available for teaching. Although this Division is primarily obstetrical, a certain amount of surgical gynecology is also performed here. There are chemistry, pathology, bacteriology and blood bank laboratories and an x-ray department. A new wing attached to the hospital is completely devoted to research laboratories.

## HOSPITAL FACILITIES

The Parkway Division, located at 245 Pond Avenue, Brookline, is devoted exclusively to the care of women with gynecological conditions. The hospital has 90 beds, 32 of them on wards, but almost all available for teaching. In addition to standard laboratory facilities and a library, the hospital houses the Cytology Laboratory for the Women's Hospital and has laboratories oriented toward research in reproduction and neoplasia.

## Children's Hospital Medical Center

This is an affiliation of ten voluntary institutions concerned with the care of children, with teaching, with research, and with child health. Included are the following:

### *The Children's Hospital*

This hospital has been located on Longwood Avenue adjacent to the Medical School since 1914. It is a general hospital for the care of children from infancy through adolescence. Pediatric, surgical, neurosurgical, neurological, orthopedic, dental, radiologic, psychiatric, pathologic, and otolaryngologic services with their associated specialties are maintained. Special clinical facilities are provided for adolescents. There are 343 beds, with an average daily census in 1966 of 304 patients. During the year ending September 30, 1966, it rendered 110,867 days of care to 11,412 inpatient admissions. (These figures are inclusive of The Children's Hospital, Infants' Hospital, Sharon Sanatorium, The House of the Good Samaritan, and the Judge Baker Guidance Center.) In addition, there were 149,098 visits to 52 outpatient clinics. Full laboratory and diagnostic services are provided for the study of material from the house and outpatient services.

### *The Sharon Sanatorium*

This organization sponsors the Sharon Cardiovascular Unit composed of 28 beds devoted to the care of non-rheumatic cardiovascular disorders including congenital heart disease. It is included in The Children's Hospital as described above.

*The Infants' Hospital*

Established as a memorial to Thomas Morgan Rotch, Jr., the Infants' Hospital operated in close conjunction with The Children's Hospital from 1923 to 1961, at which time there was a complete merger. There are 29 beds which are devoted to the care of infants in addition to a separate neonatal nursery accommodating 12 infants under the age of one month, including prematures.

*The House of the Good Samaritan and*
*The Hospital and Convalescent Home for Children*

The House of the Good Samaritan is situated at 25 Binney Street adjacent to the Medical School. There are 37 beds devoted to the care of long-term and convalescent patients and to the study of rheumatic fever and rheumatic heart disease.

In February, 1959, the renovated Good Samaritan building was reoccupied and became a long-term and convalescent care facility of the Children's Hospital. The Hospital and Convalescent Home for Children in Wellesley Hills was closed about the same time and its activities transferred to the Good Samaritan. This now provides 37 beds including 15 beds for respirator cases or patients requiring long-term orthopedic care. The study and treatment of rheumatic diseases continues. Out-patient clinics are held regularly as a part of this research program. The building also houses the endocrine laboratories of The Children's Hospital.

*The Children's Mission to Children*

A social service agency providing counseling service to parents whose children have medical and emotional problems. Also available is a foster home and a group home program for children who cannot remain at home.

*The Children's Cancer Research Foundation*

An affiliate of The Children's Hospital Medical Center, the Foundation conducts programs of diagnosis, treatment, and

clinical investigation of leukemia and other forms of cancer in children, and of cancer research housed in two buildings, the larger of which is the Jimmy Fund Building. Ten floors of laboratories are devoted to both basic medical research and to more specific programs of cancer research concerned with prevention, eradication, and cure of disseminated cancer, with greatest emphasis on cancer chemotherapy.

*The Judge Baker Guidance Center*

A child psychiatry clinic whose treatment, training, and research programs are affiliated with those of the Department of Psychiatry of The Children's Hospital Medical Center. The in-patient service has 26 beds. This unit has constructed a building in close proximity to The Children's Hospital, expanding and integrating the program in psychiatry.

## McLean Hospital

A hospital for patients with all types of psychiatric disorders, situated in Belmont and a division of the Massachusetts General Hospital. In addition to the inpatient service it offers day care, night care, and outpatient treatment programs. One fifth of the patients are adolescents and the hospital operates a high school on its grounds. McLean Hospital was the first hospital in New England and is the third oldest mental hospital in the United States. It has a complement of 254 beds, with approved capacity of 278 beds, and has been a teaching hospital connected with the Harvard Medical School for many years. During the past fiscal year 332 patients were admitted to the hospital and 306 patients were discharged. It maintains laboratories for research in social psychiatry, social psychology, clinical psychology, clinical physiology, neurophysiology, neurochemistry, and neuropathology.

## Massachusetts Eye and Ear Infirmary

The Infirmary, incorporated in 1827, and associated with the Harvard Medical School since 1866, is a voluntary specialty hospital engaged in patient care, research and teaching in the fields

of Ophthalmology and Otolaryngology. The Chiefs of the two clinical services are appointed jointly by the Infirmary and the Medical School, where they hold full professorships.

Many members of the Medical Staff also serve on the Faculty and give instruction to the medical students both at the School and at the Infirmary itself where most of the 180 beds are available for teaching. There is a high occupancy of about eighty five per cent and a short average patient stay of approximately five and one half days. In the fiscal year 1966, 10,386 operations were performed on 10,334 patients admitted to the hospital.

Although the Infirmary and its neighbor, the Massachusetts General Hospital, are separate and independent institutions, they join together in the operation of ambulatory clinics. In 1966, the Eye and Ear, Nose and Throat clinics together recorded 70,182 patient visits.

Eye research at the Infirmary is conducted in the Howe Laboratory of Ophthalmology which, though a department of the Medical School, has been housed at the Infirmary since 1932. In otolaryngological research, the best known laboratory is the Eaton-Peabody Laboratory of Auditory Physiology, a joint venture of the Infirmary and Massachusetts Institute of Technology.

## Massachusetts General Hospital

This general hospital, founded in 1811, in great part owes its existence to the foresight and ambition of two members of the faculty of the Harvard Medical School, Dr. James Jackson and Dr. John Collins Warren, son of Dr. John Warren, the first Professor of Anatomy and Surgery at the Medical School.

In a circular letter addressed (August, 1810) "to the most influential and wealthy citizens of Boston," Drs. Warren and Jackson noted the benefits that would accrue to the ill of the community through establishment of a hospital, and to the collateral advantages that would follow. Among the latter, "are the facilities for acquiring knowledge which it (the hospital) would give to the students in the medical school (Harvard) established in this town."

The Hospital opened its doors in 1821 with Dr. Warren as Surgeon-in-Chief and Dr. Jackson as Physician-in-Chief. The close and salutary relationship established at the outset between the Medical School and the Hospital has continued to the present.

In the Hospital there are services in medicine, surgery, pediatrics, dermatology, genito-urinary diseases, orthopedics, gynecology, neurology, neurosurgery, anaesthesia, dental medicine, physical medicine, and psychiatry, all of which are used in giving instruction in these special departments of medicine. The Hospital has 1,060 beds, all of which are available for teaching purposes. Over 30,000 patients were admitted to the Hospital in 1965–66. Large clinics are also used for instruction in the above clinical subjects. Clinic visits numbered 212,607 last year, of which 14,218 were first visits of new patients. There were 58,085 patients treated in the emergency ward. Laboratories for pathology, bacteriology, chemistry, metabolism, medical and surgical research, and radiology are maintained, and there is an excellent medical library, all of which are open to students in the Medical School.

In 1942 arrangements were made with the Vincent Memorial Hospital and the Hall Mercer Hospital to care for their patients in the Massachusetts General Hospital. The Vincent occupies the three lower floors of the Vincent-Burnham Building, with the three floors above comprising the Burnham Memorial for Children.

In 1943 the Collis P. Huntington Memorial Hospital and its associated laboratories of the Harvard Cancer Commission were transferred from their former location adjacent to the Medical School to the buildings of the Massachusetts General Hospital.

## Massachusetts Mental Health Center
(formerly the Boston Psychopathic Hospital)

This is a state institution for acute, curable, incipient, and doubtful cases of mental disease. The hospital was opened to patients in June, 1912 as a department of the Boston State Hospital. It

became a separate institution in 1920. It has 200 beds, of which 14 are available for children. All of the beds are available for teaching and receive patients at the rate of about 900 a year. The hospital is equipped with psychological, clinical, biochemical, and research laboratories. The out-patient department is made up of an adult and child division and receives more than 4,000 new patients per year — total patient visits number more than 45,000. In addition to the psychoses and neuroses, the clinical material includes cases of maladjustment, personality problems, behavior disorders of childhood and mental defect.

## New England Deaconess Hospital

This is a 360 bed specialty hospital located one block from the Harvard Medical School. The physical plant includes the Palmer Memorial, George F. Baker, Central, and Deaconess Buildings as well as the ambulatory Joslin diabetic unit, the Norwich House for short-term psychiatric therapy, the Cancer Research Institute, the medical office building for independent staff, and the new Shields Warren Radiation Laboratory. The latter unit, constructed by the Deaconess Hospital, is operated jointly by the Deaconess, Beth Israel, and Children's Hospitals to provide facilities for the new Alvan T. Fuller Chair of Experimental Radiation of the Harvard Medical School. The Departments of Pathology and Radiology provide diagnostic and treatment facilities for all patients within the above named units as well as patients referred from the Joslin, Lahey, and Overholt Thoracic Clinics. The hospital is known for therapy in Cancer, Diabetes, Hematology, General Medicine, and all types of Surgery. It has an active post-graduate teaching program including four year specialization in Medicine, Surgery and Pathology and two years in Anesthesiology, Radiology, and Thoracic Surgery. Undergraduate teaching is limited to fourth year elective courses. Active research programs within the hospital are carried out under the direction of the Cancer Research Institute, the Diabetes Foundation, the Lahey Clinic Foundation, and the Protein Foundation.

## Peter Bent Brigham Hospital

Since its dedication in 1913, this hospital has been closely associated with the Medical School. The hospital, equipped for teaching and research in physical diagnosis, medicine, surgery, radiology, and pathology is situated on grounds adjacent to the Medical School buildings. The Chiefs of Service are Professors of the Faculty of the Medical School. There are 321 beds, all of which are used for teaching purposes. During the past year, 8,027 patients were admitted. There are also a clinic and an emergency service. The total number of visits to these facilities last year was 71,930. There are well-equipped medical, surgical, and pathological laboratories. The hospital has a School of Nursing and the oldest program in the country for dietetic interns.

## Veterans Administration Hospital (West Roxbury)

This is a 300 bed hospital for the care of general medical and surgical patients, incorporating a center for the care of patients with spinal cord injuries. It is also a center for cardiovascular surgery. All the beds are available for teaching; there were 2,621 admissions during 1966.

The hospital is administered by the Veterans Administration but is professionally closely associated with the Peter Bent Brigham Hospital (8 miles distant), with which it is affiliated for the training of residents. It has complete laboratory and X-ray facilities, a research laboratory, and its own library.

Other hospitals in the Greater Boston area in which some teaching activities are carried on include: Cambridge City Hospital; Lemuel Shattuck Hospital; Long Island Hospital (physical diagnosis); Metropolitan State Hospital; Middlesex County Sanatorium; Mt. Auburn Hospital; Pondville State Hospital and the Robert B. Brigham Hospital.

## HARVARD MEDICAL CENTER

A corporation known as the Harvard Medical Center was formed in 1956 by the Harvard Medical School and seven of its teaching hospitals ". . . to improve and advance the knowledge, practice and teaching of medicine . . . ; to assist in the advancement of medical research and investigation and the improvement of medical teaching facilities. . ."

The Center's Board of Trustees is made up of the Dean of the Faculty of Medicine, who serves as President, and a representative from each of the participating institutions, which are:

Harvard Medical School
Beth Israel Hospital
Boston Hospital for Women
  Lying-in Division
  Parkway Division
Children's Hospital
Massachusetts Eye and Ear Infirmary
Massachusetts General Hospital — McLean Hospital
Peter Bent Brigham Hospital

Harvard is exceedingly fortunate in having both privately endowed and tax-supported teaching hospitals associated with the Medical School through joint faculty appointments, joint teaching responsibilities and joint research undertakings to foster maximally the correlation of teaching, research and patient care.

Tax-supported hospitals cannot legally be part of the Harvard Medical Center and it is for this reason that such important teaching hospitals as the Boston City Hospital, the Massachusetts Mental Health Center (formerly the Boston Psychopathic Hospital), and the West Roxbury Veterans Administration Hospital are not member institutions.

## REQUIREMENTS FOR ADMISSION

In general, the Faculty of Medicine considers for admission those students who are in good standing in either arts or sciences

and also graduates of colleges that are listed as approved in the "Higher Education Directory," which is published by the Office of Education of the United States Department of Health, Education and Welfare. Academic work in foreign universities must be supplemented by a year or more of study at an approved university in the United States. Candidates for admission to the first year class must not only have met the minimum requirements but they must present evidence that their academic achievement and other credentials have been of such quality as to predict a high degree of success in the graduate study of medicine. These include, among other things, the Medical College Admission Test scores, extracurricular and summer activities, comments contained in letters of recommendation and the personal qualifications of the applicant. The selection of students is based on a total and comparative appraisal of the candidate's suitability for medicine. The student planning to embark upon a career in medicine would be well advised, therefore, to strive not for grades nor for a vocational training but for a good liberal education. He should seek to develop his intellectual, cultural and personal growth.

Tomorrow's physician must be accomplished in the science of medicine and skilled in the art of the practitioner, concerned with the social and environmental problems of people and a leader in civic and community affairs. He needs to have a broad education encompassing in some depth the natural sciences, the behavioral sciences, the arts and the humanities. Although he is expected to have a scholarly approach to one or more of these areas, narrow specialization with all of his educational effort being directed to one area is undesirable. Secondary school, college and medical school should become a continuum because of an ever improving quality of education at all levels.

The following are the minimal requirements (but not necessarily optimal):

*English:* Basic skill in the English language, including proficiency in grammar and spelling, is necessary to achieve facility for clear expression in both the written and spoken medium. It is expected

that the student will have at least four years of study of English composition and literature, at least one of these years being at the college level.

*Foreign Language:* The student is expected to have competence in a foreign language, not merely to increase ability to read more extensively in the medical literature, but to increase understanding of language itself and the help this provides in developing the art of communication. Either a modern or a classical language will meet this requirement, which presupposes the equivalent of at least two years of study at the college level. If an applicant has fulfilled the language requirement for a Bachelor's degree by obtaining a sufficiently high score on the College Board examination or by passing a college language placement test, he will be considered to have met the language requirement for admission to the Harvard Medical School. In such cases, however, an advanced course in the same foreign language is strongly recommended.

*Mathematics:* Mathematics, the language of science, is a basic tool for the successful study of medicine. At least one full year of calculus in either secondary school or college is a requirement. College algebra and similar college introductory courses will not suffice.

These basic skills in language and mathematics, which can be acquired in secondary school or in college, should be pursued in the former to the extent that an opportunity is available.

*Chemistry:* At least two full courses in chemistry in college are required. It is expected that there will be a minimum of one full course in both inorganic and organic chemistry. Adequate time in the laboratory, including familiarity with quantitative techniques, is important in this experience. If the student has advanced placement credit for introductory chemistry, it is recommended that a course in physical chemistry would best provide for the minimum requirement in inorganic chemistry and will be of considerable benefit to the study of biochemistry in medical

school. In many states advanced placement courses may not be accepted for licensure.

*Biology:* A student must have taken at least one full course of biology in college. His total biology experience (secondary school and college) should have emphasized structure, function, natural history and evolution of plants and animals. There should also have been an introduction to molecular biology. Laboratory experience in these courses is essential.

*Physics:* One full course of physics in college must be offered. If a student has advanced placement credit for secondary school physics, he should take a full year's work in one or more areas of advanced physics.

*Recommended Courses:* As mentioned above, physical chemistry will provide an additional background for the study of biochemistry. Comparative anatomy, genetics and embryology may be of help during the first two years of medical school.

Psychology and behavioral sciences have value for increasing the understanding of man. Such courses, however, cannot be considered as a substitute for gaining first hand knowledge of human activity through the study of literature, history, art and religion.

The undergraduate curriculum should contain both balance and depth. In general, approximately one half of the courses should be devoted to the study of humanities and at least one fourth to science.

Depth of knowledge and scholarly experience should be gained by selecting the field of major study which is of greatest interest to the student. The goal of a liberal education is an end in itself and should not be considered merely as preparation for a graduate school.

An increasing number of students are being admitted to college with advanced placement in one or more courses on the basis of superior ability and educational attainment in secondary school. The program of advanced placement is looked upon with favor

when it improves and increases the challenge of secondary school education and when it permits an enrichment of the student's college years by enabling him to take upper level and graduate level courses, but the program is not encouraged when the aim is merely to speed the student through college. Leaving college at the end of three years is undesirable unless a student's education has been delayed, and he is older than his classmates. In the final analysis, however, it is not the number of years in college or hours in a course, but the quality of education and maturity of a student that determines his readiness for medical school. Since the requirements for admission to the Harvard Medical School now include four courses in science in college, the student who has received advanced placement credit for secondary school science is fortunate in that he will thus enrich his knowledge of the sciences by studying courses at a more advanced level and at the same time assure himself of fulfilling the licensing requirement in all of the United States.

Honors courses and independent study are encouraged both for the educational depth they provide and more so because of the scholarly experience which will develop into a lifelong habit of self education.

No attempt should be made to anticipate the work actually given in medical school — to do so is a double mistake: it eliminates the chance to explore a field that will be unavailable later, and it may give the student a false sense of security in a subject with which he has some familiarity leading him to neglect it in medical school under the competitive pressure of other courses.

*The Medical College Admission Test* of the Association of American Medical Colleges is required of all applicants for admission and is given in May and October of each year. Applicants are urged, whenever possible, to take this test in May of the year preceding the expected date of matriculation. An application will not be considered from an applicant who has not taken the Medical College Admission Test by October of the year in which he applies.

Information regarding this test, administered by the Psychological Corporation, may be obtained by writing to Medical College Admission Test, the Psychological Corporation, 304 E. 45th Street, New York, New York 10017.

*Interview:* When the Committee on Admission deems an interview to be helpful, the applicant will be requested to make an appointment with either a member of the Committee in Boston or, if at a distance, with a regional representative. Any applicant is welcome to seek an interview for information or for clarification of the data in his application.

*Application Procedure:* One class only is admitted each year, to begin in mid-September. Application blanks are ready for distribution after June 1 of the year preceding expected matriculation. These should be returned to the office of the Committee on Admission, Harvard Medical School, 25 Shattuck Street, Boston, Massachusetts 02115, as early in the fall as possible. *No application will be accepted after November* 1. If a student has not received acknowledgment of receipt of his application within two weeks after he has filed it, he should notify the office of the Committee on Admission.

The Admission Committee begins its consideration of applications shortly after the first of October. Since acceptance depends upon a comparison of the total picture of each applicant with all others, notification of acceptance will be sent only on November 15, December 15 and January 10. The majority of the places in the class are offered on the last date. The class roster is usually complete by January 15, when a waiting list is established to fill any vacancies which arise as a result of withdrawals. During the process of studying applications, when it appears that an applicant has little likelihood of being accepted, he will be informed of this fact so that he can make other plans for his medical education.

Applications will not be considered from candidates who have been refused admission on two prior occasions.

Since a complete catalogue is available in most college libraries,

it is not usually sent to individuals. The staff of the Admission Office encourages visits from potential applicants.

## Admission to the Second and Third Year Classes at the Harvard Medical School

The extensive clinical facilities for teaching in the third and fourth year make it possible to add a limited number of students to the class at the beginning of the third year. Only students of high scholastic standing will be considered for transfer. Preference will be given to applicants for transfer from two year medical schools. Applicants for transfer from other four year medical schools will be considered only if there are the most compelling reasons for such a transfer and the request has both the approval and hearty endorsement in writing of the dean of the medical school from which a student wishes to transfer. It is requested that the dean's office submit both a transcript of academic performance in the medical school as well as a certificate indicating that the time spent in medical studies is at least equal to that of the class to which a student seeks admission. Full credit for work done elsewhere will be allowed as a rule.

Only an occasional vacancy occurs in the second year class, which may be available to properly qualified transferring students.

Applications for transfer into the second and third year classes may be obtained from the office of the Committee on Admission approximately one year prior to the expected date of transfer. Completed applications must be submitted by February 1 of the year of transfer. Decisions about transfers into the third year class are made during March. Decisions about transfers into the second year class are not usually determined until the end of the academic year.

No applications for transfer into the fourth year class are accepted.

## Information for Servicemen

The Harvard Medical School welcomes inquiries regarding future application from men who are now on active duty with the armed forces. The Committee on Admission cannot act on applications from men still on active duty and not released from service. The applications of men on terminal leave or whose date of discharge is definitely known may be considered by the Committee. The qualifications for admission remain essentially the same for veterans as for civilian applicants. Before the acceptance of a veteran can be final, the applicant will need to submit photostatic copies of discharge papers or similar evidence of honorable release. Where available the applicant should file also a copy of his "Report of Separation" on which is listed in detail his service record and training. If the Committee does not act favorably on an application, certifications furnished by the applicant may be returned, at his request. It is the responsibility of the applicant to take the necessary steps toward obtaining the governmental benefits for which servicemen are eligible. On request, the section on Veterans Affairs of the Comptroller's Office at Harvard will furnish a statement of the necessary procedures to receive such benefits required by the Veterans Administration. The University has established this office to form a central point for answering inquiries and advising veterans. For matters relating to veterans' affairs and not connected directly with the Medical School, the applicant should feel free to write to the Comptroller's Office, Veterans Affairs, Holyoke Center, 1350 Massachusetts Ave., Cambridge, Massachusetts 02138.

## Applications from Foreign Students

A candidate from a foreign university may file application for admission, but if he has attended a university or medical school which has not received approval by the Approving Authority of the Commonwealth of Massachusetts, specific approval from the Authority must be gained before he can be admitted. In

general, it is the policy of the Committee on Admission to require that foreign students spend two years studying at an approved undergraduate college in this country before applying for admission to the Harvard Medical School. This policy has been established in order both that the applicant may become familiar with the language, customs, and methods of teaching in the United States, and that the Committee may obtain a better evaluation of his qualifications and preparation for medicine. Exception to this policy may be made in the case of qualified applicants from schools in the British Isles.

Students seeking transfer to the second year class from foreign medical schools may be required to take the examinations in the first year subjects at the regular time they are given at the Harvard Medical School in January and June. Students applying for transfer to the third year at the Harvard Medical School will be required to take Part I of the examinations given by the National Board of Medical Examiners and to achieve scores satisfactory to the Committee on Admission.

## Foreign Students

All students who are not citizens of the United States will be referred before registration to the Harvard International Office, Holyoke Center, 75 Mt. Auburn St., Cambridge 02138, where they must present a statement of admission, show their passports, and fill out a Student Registration form. They will then receive a card for presentation at registration, showing they have been cleared by the International Office.

This office serves as the official liaison agency between the University and the United States Department of State and Immigration and Naturalization Service. It maintains a registry of all non-U.S. citizens in the various Schools or Departments of the University, and it furnishes these members of the University community with information, not only on Immigration regulations, but on the facilities available to them through other Harvard offices, and from recognized outside organizations interested in

the welfare, housing and hospitality of those unfamiliar with this country.

### Special Students

Individuals wishing to take courses or to engage in special study under the Faculty of Medicine, who are not candidates for the degree of Doctor of Medicine or regularly enrolled as students under another Faculty of the University, may apply for admission as Special Students. Candidates should be mature individuals with serious and compelling reasons for wishing to pursue special programs of study at the Harvard Medical School. Application for admission to the status of Special Student should be submitted to the Chairman of the Committee on Admission of the Faculty of Medicine. Each of these students will be under the charge of the Dean and a member of the Faculty designated by the Dean to serve as his special advisor. Admission to Special Student status is ordinarily for a maximum of one year. Only with the approval of the student's advisor, the departments concerned, and the Dean may this period be extended. Persons wishing to audit or to take for credit any course in the Medical School must register by filing an application as a special student. Forms are available in the office of the Committee on Admission.

*Tuition Fee:* Varies according to the courses taken and is based on a proportion of the annual fee for instruction.

Special Students at the Medical School wishing to take courses under the Faculty of Arts and Sciences must register with the Dean of Special Students, Holyoke Center, 75 Mt. Auburn St., Cambridge, Massachusetts 02138.

## COURSES FOR GRADUATES

This Department of the Medical School offers qualified physicians courses of varying length in the subspecialties of medicine.

Facilities for graduate instruction are available at the Harvard Medical School and at the affiliated teaching hospitals. Information concerning courses can be found in the catalogue of Courses for Graduates, and inquiries should be addressed to Daniel D. Federman, M.D., Assistant Dean.

## DIVISION OF MEDICAL SCIENCES

The Division of Medical Sciences as part of the Faculty of Arts and Sciences of Harvard University, provides facilities in the departments of Anatomy, Bacteriology, Biological Chemistry, Neurobiology Pathology, Pharmacology and Physiology of the Harvard Medical School for advanced study and investigation leading to the degrees of Doctor of Philosophy and Master of Arts. In addition to the facilities of these departments, those of other research laboratories of the Harvard Medical School and its affiliated hospitals are available for the education of students. The Division offers special courses for graduate students in addition to those available to them in the Departments of Biology, Chemistry, Physics, etc. of Harvard University. The study program of the entering student may thus be shaped to meet his or her specific needs and background. The aim of the Division is to provide a broad education in the biological fields mentioned and specialization in one of them for those who wish to pursue a career of research and teaching in medical schools and universities, or of research in government, foundation and industrial laboratories.

Candidates for admission should have a thorough grounding in the biological and physical sciences. This will usually be more than the minimum for admission to medical school. Advanced courses in biology, chemistry, and physics are ordinarily regarded as preferable to undergraduate courses in bacteriology, biochemistry, histology, etc. A reading knowledge of German and one other modern language is desirable but not required for admission. The candidate will be required, however, to pass an examination in German and one other foreign language before graduation.

*The minimum requirement for the degree of Doctor of Philosophy* consists of not less than two years — at least one of which must be in residence at Harvard — devoted to advanced studies approved as suitable preparation for the degree by the proper department. Ordinarily three or more years are required for the completion of formal courses and preparation of a thesis. In estimating the amount of a candidate's study for the degree, the advanced work done in other graduate departments at Harvard or of other universities will be considered. Medical students who have successfully completed their first or second year may apply for admission to this Ph.D. program and receive credit for some of the course work completed as a medical student.

It is expected that the preparation of a thesis will require full time for usually not less than one and a half years. It must show original treatment of a fitting subject, give evidence of independent research, and be clearly, logically, and carefully written in good English. Following acceptance of his thesis, the candidate is given an oral Final Examination on the subject of his thesis and its relation to his special field and collateral subjects.

Candidates for the Doctor of Philosophy and Master of Arts degrees are registered in the Graduate School of Arts and Sciences for study in the Division of Medical Sciences. Students interested in graduate study in the Division should see the *General Announcement of the Graduate School of Arts and Sciences* and the pamphlet entitled *Higher Degrees in Medical Sciences.* These can be obtained from the Admission Office, Graduate School of Arts and Sciences, 75 Mt. Auburn Street, Cambridge, Massachusetts 02138.

Inquiries should be addressed to the Chairman of the Division of Medical Sciences, 25 Shattuck Street, Boston, Massachusetts 02115.

## SCHOOL OF PUBLIC HEALTH

The School of Public Health is one of the graduate schools of the University. Instruction and research opportunities are avail-

able in the several fields which underlie the protection of health and the investigation and control of diseases in communities. These include the basic public health sciences, biostatistics, epidemiology, health services administration, and environmental health. Other significant aspects of public health are represented by departments of demography and human ecology, microbiology, nutrition, tropical health, maternal and child health, behavioral sciences, and a newly created Division of International Health.

Students enrolled in the Medical School may take courses at the School of Public Health with the approval of the Head of the Department concerned. Further information and a catalogue may be obtained from the Registrar at 55 Shattuck Street, Boston, Massachusetts 02115.

## GENERAL REGULATIONS

In order that the time of study shall count as a full year, students of all upper classes must register on the first day of the session. A fee of $10 is charged for late registration.

For special and approved purposes fourth year students may be allowed to take a portion of their work elsewhere than at the Harvard Medical School, provided the application be approved by the Dean in consultation with the Administrative Board and the head of the department concerned, and provided the student passes an examination on this work after its completion, conducted by a member of the Faculty of the Harvard Medical School.

### Examinations and Promotion

Promotion from one class to another is contingent upon the satisfactory completion of the required work of each year. In each course, when indicated, students will be informed by their instructors as early as possible when the progress of their work is unsatisfactory.

Final grades in each course will be based upon such examina-

tions or other tests as are determined by each department. Grading is on the scale of A, B, C, D, and E (denoting failure).

Grades are averaged on the basis that A = 1, B = 2, C = 3, D = 4 and E = 6. In calculating this average, time devoted to a course is taken into account.

*Promotion Boards*

Promotion Boards have been appointed for the first, second and third years to review the work of each student at the end of the year or, at their option, at other times. The membership of these boards consists of one representative from each department whose grading, as noted above, affects the student's grade average and one member from the Committee on Examinations and not as voting members, the Dean or Assistant Dean, *ex-officiis*, and on the Promotion Boards of the first and second years, the Dean of the School of Dental Medicine, *ex-officio*.

It is the duty of the Promotion Boards to promote those qualified, to notify formally students whose work in any course is unsatisfactory — in certain cases requiring that such students repeat the year's work — and to recommend that unpromising students withdraw from the School.

Opportunity will be given to students to appeal the decision of a Promotion Board either at a special meeting or at the next regular meeting of the Board. Appeals must be sent to the Chairman of the Promotion Board, Harvard Medical School and, to be valid, be received by him within two weeks after the issuance of a Promotion Board's notice of formal action.

*General Examination*

A committee will give a General Examination to each candidate for the degree of M.D. It will recommend to the Faculty those who pass and are otherwise qualified for the degree and for honors. The conditions under which a student shall take a General Examination and the character and content of the examination will be determined by the Committee subject only to rules of the Faculty.

A student becomes eligible to take a General Examination on

successfully completing seven-eighths of his fourth year work. He may not anticipate the General Examination ahead of his class.

A student who fails three General Examinations is debarred from further attempts.

*Rules Governing Promotion*

1. A student with a grade averaging, for one year, from D(4) to E (6) will ordinarily be required to withdraw from the School.

2. A student whose grade for one year averages from 3.5 to 4 will be warned that his work is unsatisfactory. At the Promotion Board's discretion such a student may be required to repeat the year's work, or to withdraw from the School.

3. A student who is set back a year must repeat at least two assigned subjects and then he will not be promoted unless he obtains a grade of C or better in both of these subjects.

4. A student who is warned by a Promotion Board that his work is unsatisfactory and yet is permitted to advance with his class must attain for the ensuing year a grade average which is significantly better than in his previous year, failing which he must repeat the year's work, or, at the Board's discretion, he may be required to withdraw from the School.

5. A student failing in any course and yet permitted to advance with his class may not be promoted a second time nor will he be allowed to take the General Examination until that failure is removed.

6. A student failing any course will have an opportunity for re-examination only at a time set by the Promotion Board or with a succeeding class or section.

## Leave of Absence

The Faculty of Medicine believe that certain students may profitably be granted a leave-of-absence from the School for specified periods of time in order to pursue at other institutions studies and research activities related to medicine. A leave-of-

absence for this purpose should be requested from the Dean's Office. It will be granted at the discretion of the Dean.

### Withdrawal from the School

A student may withdraw from the School voluntarily upon application to the Dean's Office.

A student may be required to withdraw from the School at any time if in the opinion of his instructors he is not competent to pursue his assigned course of study or if the Faculty of Medicine determine that he is for any reason unfit to continue as a student in the School. In addition, any student who is absent without leave from scheduled courses for more than a total of 30 days during the academic year will be required to withdraw from the School.

Application for reinstatement by any student who has withdrawn voluntarily or who has been required to withdraw from the School, must be received in writing by the Committee on Admission of Students at least four months prior to the requested date of readmission. Reinstatement will be made only upon the recommendation of the Committee on Admission.

## DEGREES

### Doctor of Medicine

Every candidate for the degree of Doctor of Medicine at this University must be at least twenty-one years of age, and of good moral character. He must have fulfilled all the requirements for admission to this Medical School; give evidence of having studied in a recognized medical school at least four full years, of which one year must be spent in the regular fourth year course of this School; have passed all the required examinations; have dissected the three parts of the body to the satisfaction of the demonstrator; and furnish evidence of having engaged in the practical exercises in Medicine, Surgery and Obstetrics.

The degree of Doctor of Medicine *cum laude*, *magna cum laude*, or *summa cum laude* may be given to students of highest rating in the class, on recommendation of the Committee on Examinations and the Faculty.

The degree of Doctor of Medicine *cum laude*, *magna cum laude*, or *summa cum laude* for a thesis in a special field may be awarded to candidates for the degree of Doctor of Medicine on recommendation of the Committee on Examinations and the Faculty. The work for this may have been carried out under the Tutorial System or by independent arrangement with any member of the Staff.

The degree is awarded for original and meritorious investigation in a single subject or group of subjects and for evidence of ability, scholarship and persistent interest and industry. Candidates wishing to be considered for such honors in a special field must apply to the Dean's Office not later than March 1 of the year of graduation and must submit two typewritten copies of an original thesis prepared in form usual for publication. The written approval of the head of the department in which the work was completed must be attached.

The thesis should include an introduction with references to relevant literature; a brief statement of the purpose of the study; a description of the materials and methods employed; an account of the original observations included; a discussion of the results; a summary; and a list of the references used.

No candidate is eligible to graduate with honors for a thesis in a special field unless he has done creditable work in his regular curricular studies and has passed the General Examinations. In addition, any candidate whose qualifications are acceptable for honors in a special field must pass an oral examination before the Subcommittee on Honors in a Special Field and invited special examiners in which he will be examined not only on the subject of his thesis but on the general field of which it is a part.

Every candidate for the degree of M.D. must make application for it in writing on blanks furnished at the Dean's Office, on or before April 1.

## Doctor of Dental Medicine

Every candidate for the degree of Doctor of Dental Medicine at Harvard University must be at least twenty-one years of age and of good moral character. He must have fulfilled all the requirements for admission to this school; give evidence of having studied at least two full years in basic health sciences comparable to those offered in the first two years of this school and two years in a recognized dental school, of which one year must be spent in the regular fourth year course of the Harvard School of Dental Medicine. He must have passed all the required examinations and have satisfactorily completed the minimum requirements for work in the various laboratories and clinics.

The degree of Doctor of Dental Medicine *cum laude* or *magna cum laude* may be given to students of highest general rating in the class, on recommendation of the Committee on Examinations. The degree is also awarded, where appropriate, with honors for a thesis in a special field.

Application for the D.M.D. degree, on a form provided by the Dean's Office, must be filed at that office prior to April 1 in order for the student's name to be placed on the list of degree candidates at Commencement.

## Doctor of Medical Sciences

Candidates for this degree must matriculate as medical students and complete with an honor grade the regular elementary courses offered by this School, together with such other subjects as may be recommended by the Faculty. Ordinarily this preparatory training will be equivalent to the first two years of the course of study leading to the degree of M.D. In addition, all candidates are required to have a reading knowledge of French and German. In estimating the amount of a candidate's study for the degree, study completed in other approved medical schools will be considered.

Following the completion of this preliminary training, the student shall devote himself for not less than two years to the inten-

sive study of one of the fundamental medical sciences and to the preparation of a thesis. The thesis must show an original treatment of a fitting subject and give evidence of independent research.

There shall be two examinations for every candidate for this degree: a general examination, before entering upon the work of the last two years, covering the elementary medical sciences; and a final examination, upon acceptance of the thesis, covering the particular medical science chosen as a special field.

### Higher Degrees in the Medical Sciences

The degrees Doctor of Philosophy and Master of Arts are offered for advanced work in some special field in the medical sciences and are administered by the Faculty of Arts and Sciences, through the Division of Medical Sciences, which consists of faculty members of the preclinical departments of the Medical School. All candidates for these degrees are registered in the Graduate School of Arts and Sciences for study in the Division of Medical Sciences and must hold a degree in Arts or in Sciences from an approved college.

(See section on Division of Medical Sciences on page 40.)

## FEES AND EXPENSES

An estimate of total yearly expenses shows that the average cost of the school year is approximately $3,800 for each academic year. This estimate includes tuition, medical health fee, board and room, books, laundry, and incidentals.

The fees are:

| | | |
|---|---|---|
| Matriculation | $5 | |
| Medical Health Fee | $95 | each year |
| Instruction | $2,000 * | each year |

* Includes laboratory charges except microscope rental, breakage, damage, loss of apparatus, etc.

Term bills for the year 1966–67 are issued and payable as follows:

| *Issued* | *Payable* | *Basic Charges* |
|---|---|---|
| At Registration | Presentation | ¼ Tuition for the year<br>½ Medical Health Fee |
| Nov. 20 | Dec. 10 | ¼ Tuition for the year<br>Board through Oct. 31<br>¼ Room Rent for the year<br>Coupon Books through Oct. 31<br>Miscellaneous Charges |
| Jan. 20 | Feb. 10 | ¼ Tuition for the year<br>½ Medical Health Fee<br>Board through Dec. 31<br>¼ Room Rent for the year<br>Coupon Books through Dec. 31<br>Miscellaneous Charges |
| Apr. 20 | May 10 | ¼ Tuition for the year<br>Board through March 31<br>¼ Room Rent for the year<br>Coupon Books through March 31<br>Miscellaneous Charges |
| June 5 * | June 15 | Board to the end of year<br>¼ Room Rent for the year<br>Coupon Books to the end of the year<br>Miscellaneous Charges |
| June 30 | July 15 | Board to the end of year<br>¼ Room Rent for the year<br>Coupon Books to the end of the year<br>Miscellaneous Charges |

The term bills are sent to the student at his college address unless the Comptroller is requested in writing to send them elsewhere.

* Applies only to candidates for degrees.

A fee of $10 is automatically added to all bills which are unpaid by the due date.

Any student whose indebtedness to the University remains unpaid on the date fixed for payment is deprived of the privileges of the University until he is reinstated. Reinstatement is obtained only by consent of the Dean of the Department in which the student is enrolled, after payment of all indebtedness.

As a further condition for reinstatement a student who is delinquent in his financial obligations to the University is required to furnish a bond in the form prescribed by the University in the amount of $1,000 as security for the payment of his future financial obligations to the University.

Students who are candidates for degrees in the middle of the academic year must pay all dues to the University at least one day before the day upon which the degrees are to be voted.

All indebtedness to the University must be paid by all candidates for degrees at least one day before Commencement.

When a student's connection with the University is severed, all charges against him must be paid at once.

*Students will be held responsible for the payment of fees until they have notified the Dean in writing of their intention to withdraw from the School.*

## Microscopes

The School requires that each student secure a standard student microscope, preferably less than twenty years old, with a minimum of two oculars and three objectives including an oil immersion lens. A mechanical stage is not essential. The minimum requirements are as follows:

2 oculars 5X and 10X
1 oil immersion objective
1 16mm. objective
1 4mm. objective
1 complete substage —Abbe condenser and Iris diaphragm

In addition, the following are recommended by the Department of Pathology:

1 scanning objective 2–3X 1 quadruple nosepiece

Under the auspices of the Student Microscope Committee, arrangements have been made for the quantity purchase, at a substantial discount, of the standard American, certain German and Japanese microscopes. The standard American and German monocular microscopes currently retail at about $350, binoculars at about $550.

Further information about the quantity purchase plan may be obtained from the Student Committee.

The Medical School has a limited number of binocular microscopes available for rental each year to first and second year students unable to provide their own. The rental charge is $55 a year.

## Dormitory

Vanderbilt Hall, the Medical School dormitory, has accommodations for 305 male and 20 female students. The majority of the rooms are designed for one occupant. Many of the rooms communicate directly with the adjacent room, and there are also a number of suites for two or more persons. The price of rooms ranges from $260 to $505 per person for the academic year. Application forms for rooms in Vanderbilt Hall will be sent to all new students approximately four months before registration day. The date on which they must be returned in order to be included in the drawing will be announced at that time. Students are permitted to reengage their rooms for the following year by signing lease cards at the Student Affairs Office. The dormitory has squash courts, a tennis court, and a gymnasium which are open to members of the teaching staff and students of the Medical School. There is a parking lot for a limited number of automobiles behind the dormitory. The School assumes no responsibility for loss or damage to automobiles or other property left in the lot. First year students are urged not to bring cars.

## Dining Hall

The dormitory contains a large dining hall which is available for all members of the medical area. First year students living in Vanderbilt Hall will be required to pay full board, $652, for the academic year (September 16, 1966 through June 10, 1967) for 21 meals a week. Second year students living in Vanderbilt Hall will be required to pay full board, $670, for the academic year (September 9, 1966 through June 10, 1967) but in the second term compulsory meal contracts may be amended to provide for absence from lunch during the three clinic days of each week. A proportionate decrease in the full board rate will be made for the period involved. Students desiring the amended contract should apply to the Dining Hall checker. Graduate students and others living in the Hall will also be required to sign on for the 21 meals a week for their first two years of residence.

## Student Health Service

The Medical Area Health Service, providing medical care for the students, is open Monday to Friday from 8:30 a.m. to 5:00 p.m. Saturday from 9:00 a.m. to 12:00 noon. On Saturday afternoons, Sundays, nights, and holidays one of the staff physicians of the Health Service is available by telephone. If emergency care is required, the Emergency Ward of the Peter Bent Brigham Hospital may be utilized. A complete medical examination of each new student is required at the beginning of the school year. This is conducted by appointment shortly after school opens.

Upon registration, each student receives a booklet which describes the medical services available from the Medical Area Health Service. Hospital insurance is available through the plan for wives and children of married students.

Successful small pox vaccination within three years prior to entrance to Harvard Medical School is required. A completed certification of vaccination must be submitted before registration.

Any illness necessitating absence from classes must be reported to the Health Service.

### Student Employment

Only a limited amount of outside work can be done without taxing a student's health and scholarship, and the student is urged, when it is possible, to devote himself to a regular program of study and recreation, giving as little time to outside work as is feasible with his plan for financing his medical education. A limited number of positions offering room and board in return for laboratory or minor clinical services in hospitals are available to second, third, and fourth year students. Few opportunities are open to first year students.

## FELLOWSHIPS

The Fellowship Funds of the Harvard Medical School are, except where otherwise noted, administered by a Standing Committee of the Faculty. Applications for support from these funds should be sent to the Dean's Office.

Edward Hickling Bradford (1918). Anonymous. To be used for medical research or instruction separately or in connection with any other foundation, in such manner as may be prescribed.

Bullard (1891). William Story Bullard, in memory of three physicians "distinguished for their honorable personal character and their professional services in this community":

George Cheyne Shattuck Memorial
John Ware Memorial
Charles Eliot Ware Memorial

Any one or all of these fellowships may be paid to any student or member of the medical profession appointed to make such original investigations in Medical Science as will be most useful to the profession and to the community. The results of these investigations shall not, however, be published as a research per-

formed under the grant of a Bullard Fellowship, unless the work shall have received the approval of the Committee.

Holders of the fellowships must do throughout the academic year the equivalent of at least ten hours' work a week and make a report thereon.

Arthur Tracy Cabot (1913). Dr. and Mrs. Frederick Cheever Shattuck. In memory of Arthur Tracy Cabot, A.B. 1872, M.D. 1876. For students of surgery. Ordinarily the incumbent may not engage in active practice, but is to devote himself to the advancement of surgery in the United States or elsewhere. Nomination to this fellowship is by preference to be made by the Moseley Professor of Surgery.

Walter Bradford Cannon (1945). Mr. Joseph F. and Mrs. Clara Ford. A fellowship in Physiology.

Henry A. and Camillus Christian (1956). Henry A. Christian. To be appointed by the Hersey Professor of the Theory and Practice of Physic. The fellowship shall be held preferably by the same individual for a period of five years. The greater part of his time shall be devoted to medical investigation, preferably in the field of clinical medicine.

Harold C. Ernst Memorial Fund (1938). Mrs. Ellen L. Ernst. A scholarship or fellowship in the Department of Bacteriology.

Charles Follen Folsom (1908). Founded by more than sixty persons in memory of Charles Follen Folsom, A.B. 1862, M.D. 1870. A Teaching Fellowship in Hygiene or in Mental and Nervous Diseases. For the present assigned to the Department of Neuropathology-Neurology.

Louis W. Gilbert (1943). S. Louise Gilbert. Income to be used for the study of chronic diseases.

Samuel Jordan Graham (1961). E. Norma P. Graham. Fellowship in surgery.

Judge and Mrs. Samuel Jordan Graham Memorial (1961). E. Norma P. Graham. Postgraduate study or research.

Charles Dustin Hunking, M.D. (1948). Sarah S. H. Cheney, in memory of her brother, Charles Dustin Hunking, M.D., a member of the Class of 1871 of Harvard University and of the Class of 1876 of Harvard Medical School. To enable a graduate of Harvard Medical School, who is also a native of Haverhill, Mass., to do medical research.

Louis E. Kirstein (1937). Friends of Louis E. Kirstein. For the promotion of scientific medical education.

John R. Kissinger (1911). Harold C. Ernst. For a fellowship or salary of an individual engaged in the investigation of the causation of infectious diseases, preferably in the direction of tropical medicine. Recommendation to this fellowship is made by the Professor of Bacteriology in the Medical School.

William O. Moseley, Jr., Travelling Fellowships (1912). The bequest of Julia M. Moseley makes available fellowship funds to graduates of the Harvard Medical School for postdoctoral study in Europe. The Committee, anxious that these fellowships be outstanding awards, has voted that the amounts awarded for stipend and travelling expenses will be determined by the specific needs of the individual. In considering candidates for the Moseley Travelling Fellowships, the Committee will give preference to those Harvard Medical School graduates who (1) have already demonstrated their ability to make original contributions to knowledge, (2) have planned a program of study which in the Committee's opinion will contribute significantly to their development as teachers and scholars, and (3) clearly plan to devote themselves to careers in academic medicine and the medical sciences. Individuals who have already attained Faculty rank at Harvard or elsewhere will not ordinarily be considered eligible for these awards.

Application forms may be obtained from, and completed applications should be sent to: Secretary, Committee on Fellowships in the Medical School, Harvard Medical School, 25 Shattuck Street Boston, Massachusetts 02115. The Committee may request candidates to present themselves for personal interviews.

Francis Weld Peabody Memorial (1929). To be awarded on the recommendation of the Dean and full professors of Medicine in charge of the clinics of the Boston City Hospital, the Massachusetts General Hospital, and the Peter Bent Brigham Hospital, to properly qualified graduates of medical schools to enable them to devote further time to intensive clinical and laboratory studies.

Jeffrey Richardson (1933). William Lambert Richardson, A.B. 1864, M.D. 1867. To be awarded each year to some deserving student, upon his graduation from the Harvard Medical School, who desires to continue his studies either here or abroad.

Henry P. Walcott (1910). Dr. Frederick Cheever Shattuck. For a Fellow in Clinical Medicine appointed on nomination by the Jackson Professor of Clinical Medicine. The recipient shall not engage in private practice but must devote his time to teaching and clinical research.

Whitman (1933). Mrs. Bernard C. Whitman, in memory of her husband Bernard C. Whitman, A.B. 1846, and of her son Crosby C. Whitman, A.B. 1886. Available for a graduate of Harvard Medical School pursuing the study of medicine or surgery at the École de Médecine de Paris.

Wyman Whittemore (1963). Francis Lee Whittemore. Scholarships in surgery.

William Hunter Workman (1925). William Hunter Workman, M.D. 1873. To enable one or more graduates of the Harvard Medical School to pursue postgraduate studies in medicine in this country or abroad. In exceptional cases, fourth year students will be eligible.

## SCHOLARSHIPS

### Harvard Medical School National Scholarships

In order to make it possible for young men of outstanding ability and promise to come to the Harvard Medical School, two or three

Harvard Medical School National Scholarships will be offered to incoming members of the first year class. These scholarships will carry a stipend sufficiently large, if necessary, to meet all the student's essential expenses. Successful applicants who maintain a high honor record at the Medical School will continue to hold these scholarships throughout the Medical School course.

The offer of these scholarships is made possible by gifts from Mr. Edward S. Harkness, Dr. Daniel F. Jones, and Dr. Franklin S. Newell. The donors expressed the hope that through these scholarships superior men who could otherwise not receive a medical education would be enabled to attend the Harvard Medical School. They also expressed the hope that some of these men might wish to return to their own communities to carry on the practice of medicine.

Direct application for these scholarships cannot be made since all accepted first year students are considered as candidates, the awards being made without reference to financial circumstances. The stipend will vary depending on the resources of the recipient.

## General Scholarships

The following scholarships are open to students who have been admitted to the School at the time of application. Approximately $155,000 is available annually from the general scholarship funds.

The Cheever, Gerry, Greene, and Haven Scholarships are awarded only to students of the first year class. The Hayden and Webster Scholarships may be so awarded. All the other scholarships are available to members of all classes.

Information concerning all forms of financial assistance may be obtained from the Office of the Committee on Admission.

Vivian B. Allen (1954). To provide scholarship aid for men who are unable to pay their own way for medical training.

Anonymous No. 60 (1960). To provide scholarships for students in the Medical School.

Edward Dana Barbour Fund (1928). For promoting medical

education in China, preference to students coming from Shanghai or its environs.

Edward M. Barringer Fund (1881). Edward M. Barringer. For the maintenance of two scholarships for students in the Harvard Medical School. Awarded to deserving students, preference being given to those of the fourth year class.

Edward M. Barringer No. 1

Edward M. Barringer No. 2

Gordon Bartlett (1919). Mr. and Mrs. Donald Gordon, in memory of their nephew, Gordon Bartlett, a student at Dartmouth College who died of wounds at St. Mihiel while serving in the Seventeenth Field Artillery. Preference is given to graduates of Dartmouth College. This scholarship will ordinarily be divided between two men.

Matthew and Mary E. Bartlett (1916). Miss Fannie Bartlett, in memory of Matthew and Mary E. Bartlett. For the benefit of a worthy and meritorious student who is in need of financial assistance.

Walter Bauer (1965). The Helen Hay Whitney Foundation. Scholarships or other beneficiary aid for any qualified student engaged in studies under the supervision of the Faculty of Medicine.

George Packer Berry (1965). Harvard Medical Alumni Association.

Lucius F. Billings (1900). Lucius F. Billings. May be divided between two or more students.

Dr. Robert Bonney Fund (1944). Robert Bonney, M.D. 1898. For the aid of needy and meritorious students.

John White Browne (1918). Mrs. Francis B. Greene. Scholarships for students in the Harvard Medical School.

James Jackson Cabot (1906). Arthur T. Cabot, Samuel Cabot

and Guy C. Cabot. For the support of scholarships for students in the Medical School.

Henry Fassett Castle (1941). William E. Castle, A.B. 1893, A.M. 1894, Ph.D. 1895, as a memorial to his son, Henry Fassett Castle, who died in November, 1919, at the age of 19, having completed the previous June the work of the first year in the Medical School.

David Williams Cheever (1889). David Williams Cheever, A.B. 1852, M.D. 1858, LL.D. For a first year student after three months' study in the Medical School.

David Williams Cheever #2 (1947). David Cheever, A.B. 1879, M.D. 1901. To be awarded at the beginning of the year to a first year medical student in hope that after the stated probationary period he may be awarded the scholarship founded by David Williams Cheever, A.B. 1852, M.D. 1858.

Eleanor Dwight Clark (1938). For one or more scholarships of the type of the Harvard National Scholarships.

Owen Copp (1936). Hattie G. Copp. To assist one or more needy and worthy students.

Cotting Gift (1900). Benjamin E. Cotting, A.B. 1834, M.D. 1837. Awarded on the basis of pecuniary need, intellectual capacity, faithfulness, and earnest endeavor.

Myron Denton (1956). Myron P. Denton, in memory of his father.

Orlando W. Doe (1893). Orlando Witherspoon Doe, A.B. 1865, M.D. 1869. To be given annually to a deserving student in the Medical department.

George Russell Eager (1936). Miss Mabel T. Eager, in memory of her father.

Henry Ehrlich Memorial (1927). Friends and family of Henry Ehrlich, M.D. 1886. To be used for the assistance of needy and worthy students regardless of creed or color.

Russell Dunson Elliott (1950). Awarded annually to properly qualified applicants, preferably of Anglo-Saxon ancestry.

Horace Putnam Farnham (1918). Mrs. Eliza Cary Farnham in memory of her husband, Dr. Horace Putnam Farnham, A.B. 1843. For the benefit of meritorious students in the Harvard Medical School.

Reginald Fitz (1954). Scholarships for students in the Harvard Medical School.

Dr. E. Peabody Gerry (1943). The income to aid first year students.

Charlotte Greene (1925). Edwin Farnham Greene. For a first year student whose previous record indicates special promise.

Dr. C. Eugene Gunther (1933). Mrs. C. Eugene Gunther in memory of her husband. To be used to maintain two scholarships for the benefit of deserving medical students.

William Waugh Haggart (1955). G. Edmund Haggart, M.D. In memory of his brother for scholarships, beneficiary aid or loans.

Edward Warren Harnden (1957). William H. Snyder, Jr. and Monica H. Snyder. For scholarships, loans or other financial aid.

Dr. Charles Harrington (1959). In memory of Dr. Charles Harrington. Beneficiary aid for deserving students.

Faith Garrison Harwood (1964). Dr. Reed Harwood. Scholarships for any qualified students at the Harvard Medical School.

George Haven (1913). George Haven, M.D. 1883. To be used annually for scholarships for students of the first year in the Medical School.

Lewis and Harriet Hayden (1894). Mrs. Harriet Hayden. For colored students. The income may be divided. If not

awarded in the Medical School, the School of Public Health, or the School of Dental Medicine, it is open to colored students in any other department of the University.

Health Professions Scholarship. Department of Health, Education, and Welfare (Public Health Service) under the Health Professions Educational Assistance Act.

Frederick Warren Hecker (1963). Bequest of Eugene A. Hecker in memory of Frederick Warren Hecker. For scholarships to worthy and needy students.

Ernest Laurence Hill (1961). Annette S. Hill. In memory of son — to assist medical students from Maine and New Hampshire.

William Hilton (1897). Two scholarships annually in the Medical School.

William Otis Johnson (1911). Mrs. William O. Johnson, in memory of her husband, William Otis Johnson, A.B. 1845, M.D. 1848.

Claudius M. Jones (1893). Claudius Marcellus Jones, A.B. 1866, M.D. 1875.

Thomas Hinckley Lanman (1961). Established by the Harvard Medical Alumni Council.

Frederic T. Lewis (1965). Bequest of Ethel S. Lewis. Scholarship for a first year student.

Alfred Hosmer Linder (1895). Mrs. George Linder. For a student of sound principles and marked ability.

Arthur Theodore Lyman and Henry Sturgis Grew Memorial Scholarship (1926). On March 19, 1951, it was voted by the Corporation . . . "to provide that such income shall be available, until further order of this board, for scholarships in the Medical School, the School of Dental Medicine, and the School of Public Health; preference to be given to Chinese students, with

the understanding that if none such apply successfully, the income may be used for scholarships for students from elsewhere in the Far East."

George Sturtevant MacPherson (1965). Estate of Janice M. Blood. Scholarships for deserving students preferably from the State of Maine or from New England.

James Ewing Mears, M.D. (1909). J. Ewing Mears. For a student throughout the full course of four years, subject to his scholastic standing and good conduct.

Medical School Class of 1879 (1909). Established by the Class of 1879 as a loan fund and later converted to a scholarship.

John Morgan Memorial (1961). The Francis Beidler Charitable Trust. For scholarships or other financial aid for students from the State of Illinois.

Ernest Omar Nay (1947). Ernest Omar Nay, M.D. 1919. For a medical student from the states of Indiana, Illinois or Ohio whose scholarship is above the average and whose financial resources are such that he cannot unaided acquire a medical education.

Joseph Pearson Oliver (1904). Patients of Joseph Pearson Oliver, M.D. 1871. To be awarded to a needy and deserving student of the Medical School.

J. Eliot Overlander (1947). John Eliot Overlander, M.D. 1909. To assist such needy medical students as may be deemed worthy of assistance by the proper authorities.

Alwin M. Pappenheimer '99 (1957). Beatrice L. Pappenheimer. For the benefit of such graduate students in the fields of medicine or music.

Jacquelyn Pines (1966). Scholarships to incoming students.

Charles B. Porter (1897). William L. Chase.

Dr. Flavius Searle (1921). Miss Mary L. Searle, in memory of her father, Dr. Flavius Searle. The stipend may be divided.

Joseph J. Silbert (1937). For scholarship or loans to needy students.

Eleanor B. and Channing S. Simmons (1954). Scholarships for two needy students.

Francis Skinner (1905). Francis Skinner, Esq. To be used in small sums to meet the urgent needs of meritorious students in the payment of term-bills or other expenses.

Charles Pratt Strong (1894). Friends and patients of the late Charles Pratt Strong, A.B. 1876, M.D. 1881.

Isaac Sweetser (1892). Mrs. Anne M. Sweetser. To be "devoted to the aid of poor students of ability who would not otherwise be able to continue the studies necessary for their profession."

Edward W. and Elsie B. Taylor (1961). Katherine B. Taylor. For financial aid to students.

John Houghton Taylor (1966). Mrs. John H. Taylor in honor of her husband, John H. Taylor, A.B. 1913, M.D. 1916. For financial aid to students.

John Thomson Taylor (1899). Mrs. Frederic D. Philips, in memory of her brother, John Thomson Taylor. To be paid to some meritorious undergraduate of the Medical School without regard to his pecuniary circumstances.

Mary Thacher (1956). Mary Thacher. To be applied against the tuition of needy students preferably from first, Yarmouth, Massachusetts, secondly from the Cape Cod region of Massachusetts, and thirdly from Massachusetts.

James Rockwell Torbert (1958). Elizabeth T. Torbert. In memory of her husband James Rockwell Torbert, H.M.S. 1902.

Walker Scholarships (1922). Miss Leslie Walton Walker, four scholarships.

Dr. Charles Walker

Helen L. Walker

Anna G. Walker

Leslie W. Walker

Richard H. Wallace (1960). The family and friends of Richard H. Wallace, H.M.S. 1927.

Abraham A. Watson (1923). Miss Catherine E. Walker. For the benefit of students in the Medical School.

Major Harrison Briggs Webster, U.S.A. Memorial (1921). Gift of L. Florence Webster in memory of her son, Class of 1905, to sons of members of that class or to a needy student in the Medical School.

Charles H. Weed Memorial (1961). Friends, students, and patients of Dr. Weed. For scholarship or other financial aid to students.

Dr. Charles J. White (1959). Mrs. Bertha Lea Stone, Mr. Charles B. Barnes and Sundry Donors. For scholarship or fellowship or other academic purpose.

Edward Wigglesworth (1897). The family of Edward Wigglesworth, A.B. 1861, M.D. 1865.

James F. and Helena C. M. Willis (1961). Helena C. M. Willis. For a student who is a native of Boston.

George Bernays Wislocki (1957). The family and friends of Dr. Wislocki. For one or more graduates or medical students who show unusual promise in some area of the basic medical sciences.

Paul Richmond Withington, Jr. (1960). The family and friends of Paul Richmond Withington, Jr.

S. Burt Wolbach (1955). Dr. and Mrs. Robert E. Gross.

## School of Dental Medicine Scholarships

The Harvard School of Dental Medicine is fortunate in having financial assistance available to its students. Scholarships are awarded on the basis of academic excellence, financial need or a combination of factors. Application for financial aid may be made at any time to the Associate Dean for Student Affairs of the School of Dental Medicine.

Joanna Alford Bequest (1785). Mrs. Joanna Alford. To be used for scholarships for those students who are under low and indigent circumstances.

Lawrence Wills Baker Memorial Fund (1956). The gift of friends in memory of Dr. Baker, '98, Professor of Orthodontia. A scholarship for a student who has shown aptitude and interest in the field of orthodontics.

Dwight M. Clapp (1926). Clara Josephine Clapp in memory of her husband, Dwight M. Clapp, D.M.D. 1882. For the education of a male student born in Massachusetts, preferably one who has a college education or training of a classical character.

Dental School Alumni Scholarship (1937). A gift of the Class of 1912.

Thomas Alexander Forsyth (1929). Thomas Alexander Forsyth scholarship to two deserving men, awarded continuously until they have completed the course.

Harvard Dental Alumni (1949). Selection of a candidate shall be based upon character, scholarship, and promise within the field of dentistry. The award may be offered as a scholarship to an undergraduate student of the third or fourth year or as a fellowship for graduate work.

Harvard School of Dental Medicine National Scholarship (1960).

As part of the Harvard National Scholarship plan, prize scholarships are awarded to one or more members of each class

entering the Harvard School of Dental Medicine. The selection of recipients is based on academic promise without reference to financial need. The amount of the stipend, however, is in proportion to the student's actual necessities, except that a certain minimum award is granted to all prize scholars. Each student accepted by the Committee on Admission is considered as a candidate for a National Scholarship. An individual application cannot be made. The prize scholarship is awarded for one year. If the student maintains a satisfactory record, the scholarship will be renewed annually.

Health Professions Scholarship. Department of Health, Education, and Welfare (Public Health Service) under the Health Professions Educational Assistance Act.

Frank Randall McCullagh (1964). Estate of Frank R. McCullagh. To assist worthy and indigent students to finance themselves through dental training.

Eugene Hanes Smith (1920). Alumni Association. To be awarded to a third or fourth year student who has been a student in regular standing during the first and second years.

Peter E. Strauss (1922). Emily R. M. Strauss. In memory of her husband.

Clarence B. Vaughan (1965). Bequest of Clarence B. Vaughan. To aid worthy students in acquiring and completing their education in dental medicine.

## Fellowships and Scholarships Available in other Departments of the University as well as in the Medical School and School of Dental Medicine

The fellowships, scholarships and loans listed below which are marked with an asterisk (*) give preference to, or are restricted to, students who come within the special terms set forth. Unless otherwise stated, applications should be made, before

February 1, to the Deans of the Medical School and School of Dental Medicine.

*John Austin Amory, Class of 1907, Scholarship Fund (1954). Gift of Roger Amory, Class of 1910, to establish "the John Austin Amory, Class of 1907, Scholarship Fund . . . . to provide one or more scholarships for candidates for a degree in any college or graduate school of the University." Under certain conditions a grandson by male line of John Austin Amory, '07, may be entitled to the income. If no awards are made to preferential candidates, the income shall be assigned to the College Admission and Scholarship Committee.

Anonymous No. 63 (1961). Anonymous gift "to provide an endowment fund, the income to be used for scholarships to graduates or undergraduates in Harvard University or Radcliffe."

Hattie G. Atkins Bequest (1961). Residuary bequest of Hattie G. Atkins in memory of her ancestor, Matthew Gannett, the income to be used for not more than two graduate or undergraduate scholarships.

William Bridgman Atkinson '39 Memorial Fund (1952). Anonymous gift "to provide one or more scholarships or beneficiary grants to graduates or undergraduates in Harvard University. These awards shall be based on need and character and not scholarship alone."

Edward Austin Bequest (1899). For fellowships or scholarships in any department of the University.

Jason S. Bailey Fund (1952). Residuary bequest of Jason S. Bailey. For scholarships in any department of the University.

Frank B. Baird, Jr. Fund (1955). Gift of the Frank B. Baird, Jr. Foundation, to establish the Frank B. Baird, Jr. Scholarship. Income assigned to the Graduate School of Education.

*Zlatko and Joyce Balokovic Scholarship Fund (1966). A gift of Joyce Balokovic in memory of her husband to . . .

"promote better international relationships through growing understanding among all peoples and in particular between the people of Yugoslavia and the United States of America." For a student from Croatia or Yugoslavia. Nominations to be submitted by the Yugoslav Academy of Arts and Sciences in Zagreb.

Albert M. Barnes Memorial Fund (1959). The income only to be used "for scholarships for students in Harvard University who are worthy recipients of such aid."

Ellen S. Bates Fund (1929). Residuary bequest of Ellen S. Bates. For scholarships to deserving students in any department of the University. To be awarded every third year, with the next award to be made in 1967.

*Baxendale Scholarship (1928). Bequest of Esther M. Baxendale. Preference: (1) descendants of Alan Bedford Hudson; (2) students of the name of Baxendale or Hudson; (3) students from Brockton, Mass., or Bourne, Mass. Birth certificate and genealogical record required of (1).

Henry A. Belcher Fund (1965). Bequest of Hannah B. Belcher. To establish a fund "to be known as the Henry A. Belcher Fund, the income of which shall be used in providing free scholarships for students of said University as the Trustees or officers thereof may direct."

*Frank Boas Scholarship Fund (1964). Gift of Mr. and Mrs. Maurits C. Boas, "to establish a graduate scholarship in any one of the graduate schools of Harvard University for one year of study. Nominations shall be submitted by the United States Educational Foundation in Belgium from applicants from Belgium or the Grand Duchy of Luxemburg, and the award shall be made by the appropriate authorities of Harvard University upon the admission of the student to the University. The income of the Fund shall be used as needed to cover all expenses in the United States including tuition. With the approval of the Foundation the award may be renewed for one additional year. In the event the

Foundation fails to submit nominations for three years the income of the Fund may be used by Harvard, for financial aid to students from Belgium or the Grand Duchy of Luxemburg."

*Bright Legacy (1880). Bequest of Jonathan Brown Bright. For descendants of Henry Bright, Jr., of Watertown, Mass., who bear the name of Bright, registered in any department of the University. If no awards are made to preferential candidates, the income shall be assigned to the College Admission and Scholarship Committee. Birth certificate and genealogical record required to establish special claim.

*Daniel A. Buckley Bequest (1905). Bequest of Daniel A. Buckley of Cambridge, Mass. For needy and worthy graduates of Latin, High and other public non-sectarian schools in Cambridge enrolled in any department of the University. Awards to undergraduates will be made by the College Admission and Scholarship Committee.

*Godfrey L. Cabot, Inc. Scholarship Fund (1955). For scholarships and grants of "aid" to students enrolled in any department of the University. A son of an employee of Godfrey L. Cabot, Inc. or of its subsidiary and associated companies, who applies for aid or a scholarship, may be preferred in the awards from this fund.

*Frank Lawton Cady Scholarship Fund (1965). Residuary bequest of Caroline Cady Hewey . . . "for the purpose of establishing a scholarship or scholarships as a memorial to my said father, . . . the income of which shall be expended primarily in assisting worthy and deserving students, graduates of the Mansfield High School in obtaining an education at Harvard University."

*Frank Milton Cady Scholarship Fund (1965). Residuary bequest of Caroline Cady Hewey ". . . in memory of my brother, Frank Milton Cady, for the purpose of establishing a memorial to him, and to be known as the "Frank Milton Cady Scholarship,"

the income thereof to be expended primarily in assisting worthy boys of good character from the Mansfield High School."

James Emerson Carpenter Fund (1963). Residuary bequest of Emmie L. Carpenter "to be devoted annually for deserving and needy students." A portion of this fund has been set aside for use by the University Health Services at the discretion of the Director to assist needy and worthy students meet unusual medical costs.

*Madame Marguerite Carrière Fellowship Fund (1959). Residuary bequest of Louis A. Freedman in memory of his wife. The fellowship is to be awarded in alternate years to a graduate student at Harvard University for study in France and to a French graduate student for study at Harvard University. It is hoped that the aim of the American student in France will be to study the French traditions and attitude so as to better understand and explain the French reaction to the problems that concern both countries and that similar aim will guide the French student in America. In 1966–67 this award will be available to a French graduate student for study at Harvard University.

*Victor Emmanuel Chapman Memorial Fellowship (1917). Several donors. In memory of Victor Emmanuel Chapman, A.B. 1913, killed in World War I. For a French youth (or youths) for study in any department of the University. Apply through the Institute of International Education, 800 Second Avenue, New York, New York 10017, before February 1. Students already enrolled at Harvard should apply through their Schools.

*Joseph Hodges Choate Memorial Fellowship (1919). Gift of the Harvard Club of New York City in memory of Ambassador Joseph Hodges Choate, A.B. 1852. Awarded upon the nomination of the Vice-Chancellor of the University of Cambridge, England, to a British subject coming from that University to study in any department of Harvard University.

*George Chase Christian Memorial Scholarships (1936). Gift of Carolyn McKnight Christian in memory of her husband,

George Chase Christian, A.B. 1895. To be awarded as National Scholarships to residents of Minnesota, for study in any department of the University, preferably the graduate schools.

*Mark D. Cory Scholarship (1954). Residuary bequest of Mark D. Cory. To be awarded to a worthy graduate of the Gadsden High School, Gadsden, Alabama, to be selected and designated by the faculty of said high school. Available for students in any department of the University. Administered by the College Admission and Scholarship Committee.

Myer Dana and Etta Dana Scholarship Fund (1953). Gift of Etta (Mrs. Myer) Dana. To provide scholarships or beneficiary aid to needy and deserving students in the College, Law School, or Medical School. Awards are made upon the recommendation of the Deans of these Schools and not upon application.

Frank L. DeLong Bequest (1964). Residuary bequest of Frank L. DeLong, A.B. 1890, A.M. 1892. The income is to be used for scholarships in Harvard University.

*Charles Downer Scholarship Fund (1927). Bequest of Charles Downer, A.B. 1889, LL.B. 1892. For students in any department of the University in the following order of preference:

A. Students of "English or Anglo-Saxon stock" who bear the family surname of Downer by right of birth or inheritance, and not because of adoption, preference to be given to such students who are descendants of Joseph and Robert Downer, of Wiltshire, England, who came to America about 1650. Scholarship awards under this category will be sufficient to pay for tuition, books, food, room and other incidentals in any academic year.

B. Descendants of members of the Harvard College Class of 1889 who are in need of assistance.

C. Residents of the State of Vermont, preference to be given to those most worthy of assistance.

D. Students worthy of assistance and of high scholarship, pref-

erence to be given to (1) Descendants of graduates of Harvard College, and (2) Those "of that old Anglo-Saxon stock which has gone forth from New England into all parts of the United States and has been the means of giving strength and stability and character to our government."

Or, any balance of income remaining after the award of scholarships as specified in paragraphs A, B and C above may be used for fellowships for Harvard graduates of high scholarship and of rare and unusual ability who are pursuing special work either at Harvard or at any American or foreign university or school.

*Dwight D. Eisenhower Scholarship Fund (1962). Gift of William A. Hinton in memory of Augustus and Maria Hinton, "the income to be used to assist graduate students in any department by way of scholarship grants, prizes for scholarly treatises or other achievements, or otherwise."

Joseph Eveleth Bequest (1896). For needy and worthy students in any department of the University.

Bradley Fisk Scholarship (1963). Gift in memory of Bradley Fisk, the income to be used "to provide one or more scholarships or other forms of financial aid to students in Harvard University."

*Thomas Hooker Flint Memorial Scholarship (1957). Established by the friends and family of Thomas Hooker Flint, Harvard College Class of 1958, who died in 1957 in a climbing accident on Mount Madison, in the White Mountains, New Hampshire. The scholarship may be awarded either to students in Harvard College or Harvard Medical School, with preference for graduates of the Belmont Hill School. Thomas Flint was born in Concord, Mass., April 22, 1936, attended Belmont Hill School, and entered Harvard College in the Class of 1958 as an Honorary National Scholar, and hoped to attend Harvard Medical School. The scholarship is established in the conviction that those who benefit from it will fulfill the promise of his short life, as expressed in the closing words of a prayer known to have been Thomas Flint's guide in life: "Help us to make the life of our

youth as lovely as the world in which it lives; the brotherliness of humanity equal to the beauty of nature."

Francis Lee Friedman Fund (1962). Gift of the O-F Foundation, Inc., the income to be used "for scholarships in Physics for undergraduate or graduate students." One third of the income is to be used for scholarships to undergraduates and two-thirds of the income is to be used for scholarships in the Graduate School of Arts and Sciences. Awards are made upon the recommendation of the Chairman of the Physics Department and not upon application.

Gage Scholarship (1948). Bequest of Homer Gage, A.B. 1882, M.D. 1887. In memory of Thomas H. Gage, M.D. 1852, Homer Gage, 1882, Thomas H. Gage, Jr., 1886, and Homer Gage, Jr., 1918. For students registered in any department of the University.

*Jean Gaillard Memorial Fellowship (1946). Established in memory of Jean Gaillard, a student of the École Centrale des Arts et Manufactures in Paris, who served as an Aspirant in the French Air Forces, was arrested by the German Gestapo, and died in the German concentration camp at Ravensbrueck April 16, 1945, a victim of Nazi inhumanity. For French youths for study in any department of Harvard University or of the Massachusetts Institute of Technology. The incumbents from year to year are to be nominated by the Board of Directors of the École Centrale des Arts et Manufactures in Paris.

Joseph Ernest and Octavia Walton Goodbar Scholarship (1965). Residuary bequest of Octavia Walton Goodbar to establish a scholarship ". . . for needy students of high scholastic standing and good moral qualities at Harvard and/or Radcliffe College."

John Tyler Hassam Memorial Scholarship (1941). Bequest of Eleanor Hassam in memory of her father, John Tyler Hassam, A.B. 1863. For students registered in any department of the University.

Nathan Hayward Memorial Scholarship Fund (1956). Gift of Anna S. (Mrs. Nathan) Hayward in memory of her husband. For Nathan Hayward Scholarships or aid to students in any department of the University.

*Caroline Cady Hewey Fund (1965). Residuary bequest of Caroline Cady Hewey ". . . for the purpose of establishing a scholarship in my name for the purpose of educating and fitting students who propose to engage in the Diplomatic Service of the United States."

*Charles W. Holtzer Fellowships (1929). Bequest of Charles W. Holtzer. For young men of German birth who have received their preliminary education in German institutions of learning, to study in any department of the University. Preference is given to students in Germany at the time of application. Students in Germany may apply either through the Deutscher Akademischer Austauschdienst, Nassestrasse 11, Bonn, or the Institute of International Education, 800 Second Avenue, New York, New York 10017, before December 1. Students enrolled at Harvard should apply through their Schools. Documentary proof of German birth and education required.

Edward William Hooper Memorial (1905). The gift of friends of Edward W. Hooper, A.B. 1859, LL.B. 1861. For one or more fellowships in any department of the University.

Charles Lloyd Huff Scholarship Fund (1949). Residuary bequest of Anna Elizabeth (Mrs. Charles Lloyd) Huff, in memory of Charles Lloyd Huff, A.B. 1913. Income assigned to the College Admission and Scholarship Committee.

Sinclair Kennedy Fund (1948). Gift of Mrs. Rae B. Kennedy in memory of her husband, Sinclair Kennedy, A.B. 1897, LL.B. 1906. For grants to students enrolled in any of the graduate departments of the University for travel and residence outside the United States. "This fund to provide grants for travel is created in the belief that an opportunity to observe and to compare, to seek meanings and reasons, may enlarge the understanding of the

traveller and, through him, be of general value." Not open to competition by undergraduates, including graduating seniors, in the College. Recommendations for Kennedy Fellowships are made on behalf of students by the Deans or Chairmen of the Departments in which the student is registered. In addition, at least two letters of recommendation from the student's instructors, and a somewhat detailed statement of purpose written by the candidate, must be submitted on his behalf. All material is then forwarded to the General Scholarship Committee Office, 906 Holyoke Center, Cambridge, before February 1.

Arthur Edwin Kennelly Memorial Fund (1964). Bequest of Reginald Grice Kennelly in memory of his father, Arthur Edwin Kennelly. For students in any department of the University, but preferably for undergraduates.

*Frank Knox Memorial (1946). Gift of Annie Reed Knox in memory of her husband, Col. Frank Knox, LL.D. (Hon.) 1942, Secretary of the Navy, 1940–44. "It is my hope that this fund . . . will play a part in an integrated program of exchange fellowships throughout the world. The Frank Knox Memorial is established because of the firm belief of my dear husband, a conviction which I share, that cooperation between the British Commonwealth and the United States of America, based upon an informed and understanding contact of the peoples of these two great countries, is an essential to international peace." Candidates shall be selected on the basis of future promise of leadership, strength of character, keen mind, a balanced judgment and a devotion to the democratic ideal. Fellowships are to be awarded annually to:

1. Students coming from the following British Commonwealth countries: the United Kingdom, Australia, New Zealand, Canada and Newfoundland. Students should apply through their university before November 1 of the year preceding award.
2. Recent graduates of Harvard College, or students who have

completed at least one year of study in one of the Harvard graduate schools, for study in any one of the countries listed above.

*Procedure for graduate students for travel grants only.* Recommendations for Knox Fellowships are made on behalf of students by the Deans or Chairmen of the Departments in which the student is registered. In addition, at least two letters of recommendation from the student's instructors, and a somewhat detailed statement of purpose written by the candidate, must be submitted on his behalf. All material is then forwarded to the General Scholarship Committee Office, 906 Holyoke Center, Cambridge, before December 1.

*Procedure for College students (graduating seniors only) for travel grants only.* Recommendations for Knox Fellowships are made on behalf of students by their Department Chairmen and House Masters or Senior Tutors. Application material is due March 1 in the Office of the Dean of the College, 4 University Hall, Cambridge. Nominees are selected by informal interviewing committees.

*Arthur Lehman Fund (1936). Gift of Adele L. (Mrs. Arthur) Lehman and her daughters and sons-in-law, Mr. and Mrs. Richard J. Bernhard, Mr. and Mrs. Benjamin J. Buttenwieser and Mr. and Mrs. John L. Loeb, in memory of Arthur Lehman, A.B. 1894. For Arthur Lehman Fellowships to be awarded along the general lines of the Harvard National Scholarship Plan. For students of exceptional merit and promise in the graduate and professional schools only of the University, preference to be given to the following: Graduate School of Arts and Sciences, Graduate School of Design, Graduate School of Education, Medical School, Graduate School of Public Administration.

Horace Louis Leiter Memorial Scholarship (1955). Bequest of Marietta D. Leiter in memory of her husband, Dr. Horace Louis Leiter, A.B. 1899. For deserving students in any department of the University.

George Vasmer Leverett Scholarship (1958). Residuary bequest of George Vasmer Leverett of the Class of 1867. To "establish new scholarships or fellowships."

*Lincoln Scholarship (1876). Residuary bequest of Miss Levina Hoar. Preference for needy and worthy students from Lincoln, Mass. If there are no such applicants, the income is assigned to the College Admission and Scholarship Committee for award to undergraduates.

Charles R. Lowell and Anna L. Lowell Scholarship (1949). Residuary bequest of Anna L. (Mrs. Henry E.) Woodbury for the establishment of two scholarships, to be known as "The Charles R. Lowell and Anna L. Lowell Scholarship" and "The James J. Lowell and Anna L. Woodbury Scholarship" for "worthy, deserving and indigent young men who may be shown to be unable to pay their tuition." Available for award in any department of the University. Income assigned to the College Admission and Scholarship Committee.

James J. Lowell and Anna L. Woodbury Scholarship (1949). Residuary bequest of Anna L. (Mrs. Henry E.) Woodbury, *see above*. Income assigned to the College Admission and Scholarship Committee.

Frances E. Markoe Residuary Bequest (1944). Residuary bequest of Frances E. (Mrs. Harry) Markoe for the establishment of scholarships for students in any department of the University.

*Alwin M. Pappenheimer '99 Fund (1957). Bequest of Beatrice L. (Mrs. Alwin M.) Pappenheimer, in memory of her husband; "the income therefrom to be used for any kind of financial assistance, whether for tuition, books, necessary maintenance and support or otherwise, to graduate students in the College or in any graduate school of the University, suggesting, but not binding the President and Fellows of Harvard College hereby, that the said income be preferably used for the benefit of such graduate students in the fields of medicine or music." The income is allocated equally between the Medical School and Graduate School of Arts

and Sciences. Awards made by the scholarship committees of those schools.

John Parker Bequest (1873). Bequest of John Parker for fellowships to further the scientific education either abroad or in the United States (including Harvard University) of exceptionally talented graduate students devoting themselves to the study of one of the natural sciences. Not open to competition by undergraduates, including graduating seniors, in the College. Candidates from the following areas are considered: Divisions of Engineering and Applied Physics (if candidate's field is concerned with a natural science), Geological Sciences and Medical Sciences; Departments of Astronomy, Biology, Chemistry and Physics. Recommendations for Parker Fellowships are made on behalf of students by the Chairmen of the Divisions and Departments listed above. In addition, at least two letters of recommendation from the student's instructors, and a somewhat detailed statement of purpose written by the candidate, must be submitted on his behalf. All material is then forwarded to the General Scholarship Committee Office, 906 Holyoke Center, Cambridge, before January 10.

*Frederick E. Parlin Fund (1928). Bequest of Albert Norton Parlin. For needy and worthy students in any department of the University, preference to be given to natives of Malden or Everett, Mass. Evidence that applicant is a native of either Malden or Everett should accompany application of student seeking to establish preferential claim.

*William Pennoyer Bequest (1670). Bequest of William Pennoyer of England, for two fellows and two scholars; one preferably to be a descendant of Robert Pennoyer (a brother of William) and the other . . . [from] . . . New Haven [Colony]. Preference to be given to undergraduate descendants. Pennoyer descendants in the graduate schools may apply for the Pennoyer Scholarship by filing such application directly with the College Admission and Scholarship Committee. Certified genealogical records required to establish claim.

*Aristides Evangelus Phoutrides Memorial (1925). Gift of friends of Aristides Evangelus Phoutrides, A.B. 1911, Ph.D. 1915, to provide a scholarship in his memory for a student of Greek birth or of Greek parentage in any department of the University. Documentary evidence of Greek birth or parentage required of applicants.

*Princeton Fellowship (1910). Gift of Cleveland H. Dodge. To be awarded to a graduate of Princeton University, for his first year of study only, in one of the graduate departments of Harvard University.

*Leon W. Redpath Scholarship (1938). Bequest of Eliza Allen (Mrs. Ellis W.) Redpath in memory of her son Leon W. Redpath, A.B. 1898. For deserving students from the State of Ohio, registered in any department of the University, with preference to residents of Stark and Tuscarawas Counties.

*Franklin Reynolds Fund (1925). Residuary bequest of John F. Reynolds. For students in any department of Harvard University and Radcliffe College who are natives of Marblehead, Mass. Application should be accompanied by evidence that applicant is a native of Marblehead.

*James A. Rumrill Scholarships (1909). Gift of Anna Chapin (Mrs. James A.) Rumrill in memory of her husband James Augustus Rumrill, A.B. 1859, to establish three scholarships, two of which are available to graduates of secondary schools in Virginia, North and South Carolina, Florida, Georgia, Tennessee and Kentucky, for their first year of residence as undergraduates in Harvard College. The third scholarship is for a graduate of a college or university in any of the above-named states for study in his first year of residence in any graduate department of Harvard University. These scholarships are not renewable. In the absence of properly qualified candidates from the above-named states, the scholarships may be thrown into general competition, as two undergraduate scholarships and one graduate scholarship. Entering students in the College apply to the College Admission

and Scholarship Committee; entering students in the graduate departments apply through the Deans' Offices of their Schools.

Arthur Sachs Scholarship and Financial Aid Fund (1958). Gift of Arthur Sachs, Class of 1901, of Paris. "To make an enduring contribution to the relations between the two countries (the United States and France), by enabling an increasing number of the most deserving and able students in France to study in the United States." The income of this fund will "provide financial assistance for French students enrolled or to be enrolled" in Harvard University. Nominations are made by the Sachs Scholarship Committee in Paris. Inquiries from French students should be addressed to Cultural Attaché, United States Information Service, 4 avenue Gabriel, Paris 8 e, France.

*Peter Brooks Saltonstall '43 Memorial (1947). Gift of the family of Peter Brooks Saltonstall, 1943, who was killed in action on the Island of Guam on August 13, 1944. Peter B. Saltonstall was the son of Leverett Saltonstall, A.B. 1914, LL.B. 1917, United States Senator from Massachusetts and formerly Governor of Massachusetts. To further the education, the health and welfare of the peoples inhabiting the Hawaiian Islands and those islands west of Hawaii, including New Zealand, the Fiji Islands and Australia and also Japan, South Korea, Hong Kong, Formosa, the Philippine Islands, Vietnam, the East Indies, Indonesian Islands, Sumatra and Thailand. The first preference is that the income of this fund be used for scholarships or fellowships to assist worthy students from the above-named Pacific regions to gain a better education at Harvard University. The stipend shall be set to supplement the holder's income sufficiently to defray all his basic expenses of tuition, board and room, and in certain instances some travel allowance may be included. Students may apply directly to Harvard or through the Institute of International Education, 800 Second Avenue, New York, New York 10017, before December 1. Students already enrolled at Harvard should apply through their Schools.

In the event that no suitable candidate for the scholarship ap-

pears, the unexpended income and its accumulation shall be available for the support of research to better the living conditions or the general well-being of the peoples in the Pacific region described above, such research grants to be made by vote of the Corporation on the recommendation of the Dean of the Faculty of Arts and Sciences.

Charles N. Shaw Fund (1960). Bequest of Charles Nason Shaw. For the support of needy and deserving students in any department of the University.

Frederick Sheldon Fund (1909). Residuary bequest of Amey Richmond (Mrs. Frederick) Sheldon, in memory of her husband. The income of this Fund is "to be applied . . . to the further education of students of promise and standing in the University by providing them with facilities for further education by travel after graduation or by establishing travelling scholarships."

Every holder of a Sheldon Fellowship, or Sheldon Prize Fellowship, must be a member of the University at the time of his appointment and must hold a Harvard degree, or be a candidate for a degree in June of the year of appointment.

*Procedure for graduate students.* Recommendations for Sheldon Fellowships are made on behalf of students by the Deans or Chairmen of the Departments in which the student is registered. In addition, at least two letters of recommendation from the student's instructors, and a somewhat detailed statement of purpose written by the candidate, must be submitted on his behalf. All material is then forwarded to the General Scholarship Committee Office, 906 Holyoke Center, Cambridge, Massachusetts 02138, before December 1. Holders may enroll at universities in this country — outside Harvard University — or abroad, for purposes of formal study or research, or they may engage in travel, or they may combine travel and study.

*Ernest Frederick Slater Scholarship (1955). Bequest of Ernest F. Slater. The income to be awarded as scholarships in any department of the University to deserving (financially or otherwise) young men who are residents of (a) the City of Orange-

burg, South Carolina; (b) the State of South Carolina; preference to be given to descendants by birth or adoption of Edward Frederick Slater, father of the donor, regardless of their residence. Not open to students in their first year at the University.

*Charles H. Smith Bequest (1947). Residuary bequest of Charles H. Smith. For awards to students in any department of the University according to the following order of preference:

1. a. Graduates of public high schools in Providence, Rhode Island, who are of scholarship rank.
   b. Graduates of public high schools in Providence, Rhode Island, who are below scholarship rank but who are considered eligible for financial aid.
2. Graduates of other (non-public) secondary schools in Providence, Rhode Island, who are of scholarship rank.
3. Any residents of Rhode Island not indicated above who are of scholarship rank.

Charles Harold Stanton Scholarship (1963). Bequest of Katharine Stanton "the income only to be used to provide a scholarship in memory of my nephew."

*William Stoughton Bequest (1701). Bequest of Lieutenant Governor William Stoughton, A.B. 1650. For awards to students in any department of the University according to the following order of preference: (a) Residents of Dorchester or Mattapan, Mass.; (b) Residents of Milton, Mass.; (c) Any needy and deserving students.

John E. Thayer Scholarships (1857). Bequest of John E. Thayer, the income to be paid "to the ten most meritorious scholars in Harvard University in Cambridge every year . . . the income shall only be paid to such meritorious scholars as who may actually need the same."

*Augustus Clifford Tower Fellowship Fund (1927). Gift of Louise G. (Mrs. Augustus Clifford) Tower for two fellowships to be awarded annually to:

1. A graduate of Harvard College, who may be either a graduating senior or a student enrolled in one of the graduate departments of the University, for study in a French university, preference to be given to a student of Anglo-Saxon descent. Graduating seniors should consult their Department Chairmen, House Masters, or Senior Tutors with regard to the application procedure. Graduate students should consult their Deans or Department Chairmen. Nomination, on the basis of application material and interview, is made by a special selection committee to the Committee on General Scholarships.

2. A French student for study in any graduate department of Harvard University. French students should apply through the Directeur, École Normale Supérieure, 45 rue d'Ulm, Paris 5e, France, early in January.

In addition to the above fellowships, a sum from the Tower Fund is set aside annually for a travel grant to either a graduating senior or a student enrolled in one of the graduate departments of the University, who is nominated by a special selection committee to attend the École Normale Supérieure in Paris, on a fellowship provided by the French Government. Candidates should be United States citizens. For application procedure see paragraph 1 above.

University General Scholarship Fund (1951). Established by the President and Fellows of Harvard College. For scholarships to students in any School or department of Harvard University.

*Thomas E. Upham Class of 1868 Fund (1939). Bequest of Marcella B. Upham. May be granted annually to worthy graduates of Harvard College in any department of the University who are "preparing to serve our country in public offices of trust and responsibility in the gift of the people, students of American parentage descended from the early settlers to be chosen in preference to others, provided they are equally worthy of assistance."

Variell Scholarship (1961). Bequest of Katharine S. Variell

in memory of Montfort Schley Variell, the income to be used for music students particularly interested in the piano. Awards are made upon the recommendation of the Chairman of the Music Department and not upon application.

*Anna Vaughn Foundation (1935). Residuary bequest of John Vaughn, A.B. 1879. For "meritorious students of Harvard University who are pursuing studies in any biological science."

Emanuel L. Verveer Bequest (1963). Bequest of Emanuel L. Verveer, S.B. 1898, "the income only to be used to aid financially deserving students, irrespective of race, creed or color."

*Helen E. Vickery Scholarship Fund (1966). Residuary bequest of Helen E. Vickery to establish a scholarship fund "to assist worthy students, with a preference to be given to students from Fitchburg, Massachusetts."

Sarah L. Viehmann Scholarship (1936). Gift of Henry Bluestone, A.B. 1906, in memory of his mother, Sarah L. Viehmann. For deserving students in the College or graduate departments of the University.

The Benjamin Weaver Fund (1961). Residuary bequest of Wealthy M. Weaver in memory of her son Benjamin Weaver, A.B. 1889, the income to be used for scholarships to students in any department of the University.

*Jens Aubrey Westengard Fund (1954). Bequest of Rebecca Aubrey Westengard. "The income is to be applied . . . to the further education of students of promise and standing in any department of the University by providing them with facilities for further education in Europe, Britain, or South America, by travel or study, or to the further education of students of promise and standing in any of those countries, by providing them with facilities for further education by travel and study in this country, preferably by study in some department of Harvard University." Students enrolled in, or expecting to enroll in, the Law School should ordinarily apply for the Jens Iverson Westengard Fund administered by that School.

James K. Whittemore Fund (1963). Residuary Bequest of Francis Lee Whittemore "the income only is to be used to provide one or more scholarships in Mathematics for undergraduates in Harvard College and students in the Graduate School of Arts and Sciences." One third of the income is to be used for scholarships to undergraduates and two thirds of the income is to be used for scholarships in the Graduate School of Arts and Sciences. Awards are made upon recommendation of the Chairman of the Mathematics Department and not upon application.

*1902 World War Memorial Scholarship (1923). Gift of the Class of 1902 in memory of their classmates, André Chéronnet-Champollion, Edward Ball Cole and Elbert Walker Shirk, and to be awarded by preference to: (1) deserving sons of 1902 men killed in World War I; (2) deserving descendants of members of the Class of 1902. Open to students in any department of the University, with preference to undergraduates. If no awards are made to preferential candidates, the income shall be assigned to the College Admission and Scholarship Committee.

*Jeffries Wyman Scholarships (1924). Bequest of Mary Wyman Davis in the name of Susan Wyman and Mary Wyman Davis. For one or more students in any graduate department of the University "who may have given promise of success in some branch of Biological Research," preference to be given to students of anatomy. Nominations are made before March 1 to the Committee on General Scholarships by a committee consisting of the Hersey Professor of Anatomy, the James Stillman Professor of Comparative Anatomy and the Director of the Museum of Comparative Zoölogy.

## LOAN FUNDS

Ample loan funds are available for students in need of financial assistance.

Loans are usually made to meet term bills; cash is provided rarely. Short-term loans, for a period of less than six months, are

available under special circumstances. In emergencies, loans may be made at any time.

Loans are available for students from Medical School funds as well as from funds allocated to the School under the Health Professions Educational Assistance Act. To provide for simplicity of administration, the interest and terms of repayment are the same on all loans regardless of source.

Loans made after January 1, 1965, shall bear no interest until the July 1 three years after the borrower's graduation from the School. Thereafter, loans shall bear interest at the "going Federal rate" in effect at the time the first loan was obtained. For the fiscal year, 1965–66, the rate was set at 4¼ per cent. For the fiscal year 1966–67 the rate has been set at 4⅝ per cent. Any subsequent change in the rate will be announced annually on or before July 1.

The principal and interest are to be repaid over the ten year period that begins three years after graduation from the School. The period of payment may be deferred for three years of military service and/or three years in the Peace Corps.

Payment may be made in equal or graduated installments with the right of the borrower to accelerate payments.

If the student borrower leaves the School prior to graduation, the interest on his loan shall begin to accrue on the date of his separation from the School.

Applications for loans should be made to the Chairman of the Committee on Financial Aid.

## Medical School

Frank W. and Carl S. Adams Memorial Loan Fund (1955). Established by the Charles E. and Caroline J. Adams Trust as a revolving loan fund.

Dexter Fund (1963). An anonymous gift to provide loans for any qualified student engaged in studies under the academic jurisdiction of the Faculty of Medicine.

David L. Edsall Revolving Loan Fund (1928). Dr. Frederick

C. Shattuck established this fund by gift of $100,000 to be used as a revolving loan fund.

Charles William Eliot Loan Fund (1924). Given anonymously in honor of President Eliot. Principal and interest to be used for loans to students in the Medical School.

Harvard Medical School Loan (1954).

Harvard War Loan (1920).

Health Professions Student Loan Fund. Department of Health, Education and Welfare (Public Health Service) under the Health Professions Educational Assistance Act.

Harriet P. Keith Loan (1921).

George B. and Louise Kerper Fund (1956). Established by Edmund Kerper as a revolving loan fund in memory of George B. and Louise Kerper.

George W. Merck Memorial Fund (1959). Established by the Merck Company Foundation as a revolving loan fund to assist fourth year students in financing their internships.

Francis I. Proctor Aid Fund (1942).

James Henry Rand Fund (1962). Public Health Foundation for Cancer and Blood Pressure Research, Inc. To provide scholarships, loans, or other kinds of beneficial aid for any student who has received his M.D. degree at the Harvard Medical School.

## School of Dental Medicine

Loan funds are available to all students who show suitable need and whose other financial obligations do not make it improbable that a loan will be repaid. Terms of loans are identical with terms for Medical School loans.

American Dental Association — Fund for Dental Education Dental Student Loan Fund (1962). Gift of the Fund for Dental Education, Inc.

The Christian Soldier Fund (1925). Established by Miss

Caroline F. Anderson for promising dental students. The loan carries no interest but the recipient must sign a note obligating him to repay the loan not later than five years from the date of the note.

Dental Alumni Loan Fund (1927). Established and maintained by the Dental Alumni Association for financial aid to worthy students.

Lucinda Davis Fernald Fund (1936). A small fund, the gift of Adelbert Fernald, D.M.D. 1896, to be loaned to deserving New England-born students of good character.

Health Professions Student Loan Fund. Department of Health, Education and Welfare (Public Health Service) under the Health Professions Educational Assistance Act.

International College of Dentists Student Loan Fund (1962). The gift of the International College of Dentists for a revolving loan fund available only to senior students.

Robert T. Moffatt Fund (1925). A small fund from various contributors in memory of Robert T. Moffatt, D.M.D. 1895, for the benefit of needy and deserving students.

School of Dental Medicine Revolving Loan Fund (1952). Recognizing the need for student loan money in the School, the President and Fellows of Harvard College authorized an appropriation to establish this fund.

School of Dental Medicine Loan Fund (1953). An appropriation from the School's funds to establish additional loan money for needy students.

## Beneficiary and Loan Funds Available in Other Departments of the University as well as in the Medical School and School of Dental Medicine

### Beneficiary Funds

*Charles William Eliot Fund (1926). Established by the alumni in honor of Charles William Eliot on the occasion of Mr.

Eliot's resignation as President and in recognition of his forty years of service. The income is to be divided between (a) grants of aid to descendants in the direct line of Mr. Eliot who need financial assistance and who are enrolled in any department of the University or in Radcliffe College, and (b) the support of instruction and research in Landscape Architecture.

*Calvin and Lucy Ellis Aid (1899). Bequest of Calvin Ellis, A.B. 1846, M.D. 1849, supplemented by a residuary bequest under the will of his sister, Miss Lucy Ellis. To pay the fees of tuition and instruction, the cost of text-books, room-rent and reasonable board, of such descendants of David Ellis and Beulah Newell, formerly of Dedham, Mass. and John Ellis and Hannah Ellis, formerly of Walpole, Mass., as may be students in any department of Harvard University. Birth certificate and proof of descent from Ellis family required.

Harrison-Darling-Jenks Memorial Fund (1935). Bequest of Miss Laura Darling Jenks. For aiding students in attaining an education at Harvard University. Income assigned to the College Admission and Scholarship Committee.

## Loan Funds

The following Loan Funds are to be used for students in any department of the University. Students apply through their own Deans. Loans are made according to the terms ordinarily applied by the individual Schools. Applications may be obtained from the several Deans' Offices or from the General Scholarship Office, 906 Holyoke Center, Cambridge.

*John W. Appel Loan Fund (1919). Restricted to descendants of John W. Appel of Lancaster, Pennsylvania, or their appointees.

Frank Gaylord Cook Loan Fund (1951).

*David L. Krupsaw Revolving Loan Fund (1960). Preference to students from Washington, D.C.

*The Harvard Club of Washington, D.C., Loan Fund (1957). Preference for students resident in the Washington, D.C. area.

Morris Morgenstern Student Loan Fund (1959).

*New Century Club of Boston Loan Fund (1926). Preferably for men pursuing courses of study in Hebraic literature, culture and philosophy.

Jessie Smith Noyes Foundation, Inc. Loan Fund (1960). To establish a revolving loan fund.

Nelson Robinson, Jr. Loan Fund (1941).

James G. Rodger Loan Fund (1883).

Williams Fund (1942).

## PRIZES

### Medical School

Isaac Adler (1934). Frida Adler. To be awarded once in three years for the best piece of original research within that period in the United States or Canada on any subject within the medical or allied sciences.

Borden Undergraduate Research Award. Awarded to a member of the graduating class who, during any year while enrolled in the School, has carried out undergraduate research having originality and thoroughness.

Harvard Medical Alumni Association Prize. To be awarded each year to the Permanent President of the Graduating Class. It has three purposes: to extend a greeting from the old Alumni to the new, to accord respect to the graduating class by honoring its chosen leader, to select for honor a man with whom long and cordial association is confidently anticipated.

Henry Asbury Christian (1937). Dr. Samuel A. Levine. To be awarded annually on or about the seventeenth of February, which is Dr. Christian's birthday, to the student in the Fourth Year Class who has displayed diligence and notable scholarship in his studies and offers promise for the future.

Leon Reznick Memorial Prize (1958). To be awarded to a fourth year student who has shown excellence and accomplishment in research conducted during his period of study at the Harvard Medical School. Candidates for the award must submit a typewritten paper to the Dean's Office by April 1.

James Tolbert Shipley Prize (1952). Harriet S. Parker. Awarded as a prize for research carried out by a medical student, the results of which have been published or accepted for publication. Candidates for the award must submit papers to the Dean's Office by April 1.

Soma Weiss Award. Awarded each year at the Undergraduate Assembly (see page 95).

### School of Dental Medicine

Harvard Dental Alumni Medals (1953). The Harvard Dental Alumni Association awards its gold and silver medals annually for all-around scholastic excellence.

Harvard Odontological Society (1949). The Harvard Odontological Society each year presents a Certificate of Merit to the best Senior Seminar Essayist of that year. This senior is selected by the Awards Committee of the School of Dental Medicine.

Dr. Grace Milliken (1950). An award given annually when practicable, but at least once in three years, for an outstanding essay on the general subject of dental health.

## LECTURESHIPS

John Adams Lectureship on Dermatology. The income of the fund to be expended in support of one or more lectures in dermatology in any given academic year.

The Edward K. Dunham Lectures for the promotion of the medical sciences have been given annually since 1923 by eminent investigators and teachers in one of the branches of the medical

sciences or of the basic sciences which contribute toward the advance of medical science in the broadest sense. The lectures are open to the Faculty and students of the Harvard Medical School and College and all other interested professional persons. The lectures are given under the fund established for that purpose by Mary Dows Dunham in memory of her husband, Dr. Edward K. Dunham.

Laurence B. Ellis Lecture. Established by the students, associates, and friends of Dr. Ellis. To invite annually a visiting lecturer of distinction in the general field of cardiovascular physiology and disease to visit the Harvard Medical Unit at Boston City Hospital and to give a lecture during this visit to be open to the public.

The George W. Gay Lectures upon Medical Ethics are given annually at the Harvard Medical School. The fund for the establishment of these lectures was given in 1917 by Dr. George W. Gay.

The J. Howard Mueller Lectures are given annually at the Harvard Medical School. The fund for the establishment of these lectures was established in 1958 to honor the late J. Howard Mueller, Charles Wilder Professor of Bacteriology and Immunology.

The Alpha Omega Lecturer is to be nominated each year by the Alpha Omega Alpha Society. The honorarium and expenses of the lectureship to be supported from the fund established by the Society in 1952.

The Hanns Sachs Lectures in the field of Freudian psychoanalysis are supported by a gift in memory of Dr. Sachs. One or more may be given in any year.

The Dr. Andrew Yeomans Lectureship Fund has been established by members of the Class of 1934 and the Class of 1935 and friends in memory of Dr. Yeomans. Lectures are to be given annually and the lecturer will be chosen from young clinicians

in the fields of clinical research by a committee named by the donors.

## THE CANCER COMMISSION OF HARVARD UNIVERSITY

Under the will of the late Mrs. Caroline Brewer Croft a sum of money was received in 1899 for the investigation of the cause and treatment of cancer. Since that time other sums have been contributed for cancer research and the Cancer Commission of Harvard University has been organized.

The Commission supports the Huntington Hospital beds, outpatient department, and cancer research laboratories at the Massachusetts General Hospital. It provides a service for pathological diagnosis of tumor tissue for the State of Massachusetts. This service was transferred in 1951 from the buildings of the Harvard Medical School to the Cancer Research Institute of the New England Deaconess Hospital. The service is carried on in part in a special laboratory at the Lemuel Shattuck Hospital, in part in laboratories at the Cancer Research Institute of the New England Deaconess Hospital.

The functions of the Cancer Commission are exercised by the Committee on Research and Development which is made up of the following members: Nathan Marsh Pusey, *Chairman*; Harvey Brooks, Robert Higgins Ebert, Franklin Lewis Ford, Roy Orval Greep, James Robbins Reynolds, Theodore Ryland Sizer, John Crayton Snyder, Lewis Gard Wiggins, Henry Coe Meadow, *Executive Secretary*.

## RESEARCH FUNDS

Application for support of investigations falling within the scope of any of the following research funds should be sent to the Chairman of the Committee or to the Dean.

### Rear Admiral W. L. Capps Fund

In 1949 a bequest was received from Edna Ward Capps to be known as the Rear Admiral W. L. Capps Fund, the income from which, under certain circumstances, to be used broadly for the cure and treatment of persons afflicted with diabetes. George W. Thorn, M.D., is Chairman of the Committee administering the income from this fund.

### Proctor Fund

A bequest of fifty thousand dollars by Ellen Osborne Proctor, for the purpose of promoting the study of chronic diseases, subsequently has been increased by an additional fifty thousand dollars from another member of the Proctor family. The income of this fund is to be devoted to investigations into the nature and treatment of chronic diseases and the care of persons afflicted with these diseases while in hospitals for such investigations. Arthur T. Hertig, M.D., is Chairman of the Committee administering the income from this fund.

### William W. Wellington Fund

In 1925 a bequest was received from William H. Wellington to establish the "William W. Wellington Memorial Research Fund." The income of this fund is to be applied for research concerning the etiology and therapeutics of the diseases of man. Arthur T. Hertig, M.D., is Chairman of the Committee administering the income from this fund.

## OPPORTUNITIES FOR RESEARCH

The laboratories of the Medical School and its associated hospitals provide exceptionally rich opportunities for each medical student who wishes to participate in a research program in the field of his special interest. The wide variety of investigations underway in basic and clinical sciences assures each student of the

facilities to learn special techniques and to pursue an investigation of his choice.

Each medical student is encouraged to devote some of the free time during the school year and the summer months to a research program. Exceptional students may be permitted to withdraw from medical school for a year to devote full time to research. Any student in good academic standing who has shown promise in research may devote the entire Elective Period to research at the discretion of the Administrative Board. A considerable number of fellowships are available for the support of students engaged in summer and part-time research.

Any student interested in undertaking research is urged to discuss his program with the Associate Dean for Student Affairs or one of the Honors Tutors.

## THE UNDERGRADUATE ASSEMBLY

The Undergraduate Assembly, held late in the spring of each year under student auspices, provides an opportunity for students from all classes to present formally the results of their investigations to the students and Faculty of the Medical School. The Soma Weiss Award is made at this meeting.

## GENERAL PLAN OF INSTRUCTION

On the following pages will be found a brief description of the plan of instruction for the four years of Medical School, followed by a statement of the general plan of instruction offered by each Department. A diagrammatic summary of the medical curriculum will be found on pages 102 and 103.

### General Plan of the First Two Years

In general, during the first semester of each of the first two years, individual departments introduce selected material charac-

teristic of their particular disciplines. In the second semester of each year, the departments collaborate in the presentation of a unified approach to various problems of human biology.

In the first year, the first semester is devoted to a study of histology, cytology and developmental anatomy, and to the fundamentals of physiology and biological chemistry. Gross human anatomy is presented in the second semester together with a course in neurosciences and an area of interdepartmental teaching dealing with the histology, physiology and biochemistry of the gastrointestinal tract and endocrine glands. Three additional courses complete the material of the first year. Voluntary clinics offered on Saturday mornings throughout the first year are intended to illustrate the application of the basic medical sciences to understanding of disease in man. In the second semester there is a brief series of lectures introducing certain aspects of normal psychological growth and development. The students also take a course either in basic biostatistics or more advanced biomathematics depending upon their previous preparation.

In the first semester of the second year, the Departments of Bacteriology, Pathology and Pharmacology offer courses in their respective disciplines. A number of correlated interdepartmental exercises are also included. The last portion of the semester is devoted to chemotherapy taught jointly by the Departments of Bacteriology and Pharmacology.

During the second semester a correlated program in pathologic physiology is given. Mechanisms of disease are presented in a unified course by members of the Departments of Medicine, Neurology, Obstetrics and Gynecology, Pathology, Pediatrics, Pharmacology, Preventive Medicine, Psychiatry, Radiology, Surgery, and Tropical Public Health. In addition, practical instruction in the taking of case histories and physical examinations is given on the wards and in the outpatient departments of the hospitals at which there are Harvard teaching units.

During the second year, in addition to instruction in certain aspects of genetics, a series of lectures develops further concepts of individual psychologic functioning. Emphasis now shifts to

the nature and genesis of abnormal psychological mechanisms which result from both social and physical factors and are manifested in symptoms and behavioral disturbances.

## General Plan of the Third and Fourth Years

The instruction in the third and fourth years is carried on at the teaching hospitals affiliated with the Medical School. It is designed to teach the student to apply the principles of normal and abnormal human biology, acquired in the first two years, to the diagnosis and treatment of disease.

The program of instruction is divided into three parts which form a continuum extending from September of the third year to the end of May of the fourth year. Periods of vacation, the longest three weeks, are interspersed at intervals.

The first part consists of a three month course called the Introduction to the Clinic, the aim of which is to bring the student to a higher level of clinical competence than is possible to achieve in the second semester of the second year. Each student is assigned to one of four general hospital areas — Beth Israel Hospital, Boston City Hospital, Massachusetts General Hospital, and Peter Bent Brigham Hospital — for theoretical and practical instruction in the evaluation of patients. Time is approximately evenly divided between medicine, surgery, and the various medical specialities. This phase of the instruction is conducted six mornings and one afternoon each week in small groups on the wards and in the outpatient departments. Two other afternoons each week are devoted to a course in aseptic technique and special lectures and exercises covering a variety of topics.

The second part of the program, consisting entirely of clinical clerkships, is called the Principal Clinical Year. This year is divided into four twelve-week periods as follows: one twelve-week period is devoted to Medicine; another to Surgery; one is divided equally between Pediatrics (six weeks) and Obstetrics and Gynecology (six weeks); while the fourth is divided into four three-week sections devoted respectively to Psychiatry,

Neurology, Orthopedics, and the three specialities of Dermatology, Ophthalmology, and Otolaryngology.

The third and final part, comprising the last five months of the four years of instruction, is given over to elective programs. From the wide variety of elective courses and other instructional opportunities offered by the several departments of the Medical School, each student, with the aid of a faculty advisor, is expected to select a program of work which will allow him to explore some area of interest to him. Generally, elective courses are of two types: "block" courses, lasting one or more months, which presuppose that the student will devote the major portion of his time to the course, and "longitudinal" courses meeting for one to three hours, one to three times per week, for varying numbers of weeks. While ordinarily instruction during the elective period is confined to the Medical School and its affiliated hospitals, relevant courses in other parts of the University and at other institutions, in this country and abroad, may be included.

## The Tutorial Program and Student Research

The Tutorial Program was established in 1923 to foster student interest and participation in research. In 1957 it was expanded to provide each entering student with a tutor for his first year. Some twenty-five Tutors in Medical Sciences are appointed annually to enable first year students to meet informally in groups of five with a tutor. These weekly meetings are intended to assist the student in organizing and correlating his knowledge and to point out the implications and applications of the knowledge of basic science gained in the formal courses to clinical medicine and to research. These are not intended to be review sessions or to prepare students for examinations in the formal courses, but to develop better understanding of the medical sciences as a whole and of medicine as an art and profession. In addition the expanded Tutorial System provides an opportunity for each student during his first year to become well acquainted with some member of the Faculty to whom he may turn for advice in planning his medical career and in other matters.

In 1964 the program was further expanded to provide each third year student with a faculty advisor to assist him in the design of a program of study for his Elective Period at the end of the fourth year.

The Honors Tutorial Program of the second, third and fourth years is designed primarily to aid students who wish to undertake original research in one of the medical sciences during their medical school careers. Students doing research, or planning to do research, are assigned to the appropriate Tutor for guidance. Each of these Tutors has special competence in one of the medical sciences and meets with students individually or in small groups to assist them in deciding on a field of research or in formulating a specific research problem. The Tutors may also organize seminars and symposia to review some aspect of the field of special interest. They also help the student by placing him with the member of the Faculty whose research interests are in his field and who is best suited to guide his research.

Students may devote free time during the school year and the summer months to this research problem. Fellowships are available for the financial support of student research both during the summer months and during the school year. Students also have the opportunity to withdraw from medical school for a year to pursue a research problem. (See section on "Opportunities for Research" page 94). The results of the research may be presented as a thesis at the end of the fouth year in support of the student's candidacy for the medical degree with Honors in a Special Field.

*Abbreviations used in the following pages:*

B.I.H. = Beth Israel Hospital.
B.C.H. = Boston City Hospital.
B.H.W. (L-i. Div.) = Boston Hospital for Women (Lying-in Division).
B.H.W. (Pky. Div.) = Boston Hospital for Women (Parkway Division).
C.C.H. = Cambridge City Hospital.
C.H.M.C. = The Children's Hospital Medical Center.
C.M.C. = Children's Medical Center.
F.H.W. = Free Hospital for Women.
H.M.S. = Harvard Medical School.
L.I.H. = Long Island Hospital.
McL.H. = McLean Hospital.
M.E.E.I. = Massachusetts Eye and Ear Infirmary.
M.G.H. = Massachusetts General Hospital.
M.I.T. = Massachusetts Institute of Technology.
M.M.H.C. = Massachusetts Mental Health Center.
Mt.A.H. = Mount Auburn Hospital.
N.E.C.H. = New England Center Hospital.
N.E.D.H. = New England Deaconess Hospital.
P.B.B.H. = Peter Bent Brigham Hospital.
R.B.B.H. = Robert B. Brigham Hospital.
S.D.M. = School of Dental Medicine.
S.P.H. = School of Public Health.
W.R.V.A.H. = West Roxbury Veterans Administration Hospital.

## Division of Hours

| FIRST YEAR | | SECOND YEAR | | THIRD AND FOURTH YEARS | | | |
|---|---|---|---|---|---|---|---|
| Gross Anatomy | 229 | Bacteriology | 168 | Introduction to the Clinic (12 weeks) | | Principal Clinical Year (con't) | |
| General Histology and Cytology | 135 | Pathology (including Parasitology and Neuropathology) | 331 | Medicine | 121 | *Pediatrics | 240 |
| Physiology | 135 | Pharmacology | 120 | Surgery | 121 | *Neurology | 120 |
| Cellular Biochemistry | 150 | Pathologic Physiology † | 538 | Specialties (including Pediatrics, Psychiatry, Neurology, Dermatology, Ophthalmology, Otolaryngology, Aseptic Technique) | 121 | *Orthopedics | 120 |
| Gastrointestinal and Endocrine Systems | 145 | Growth and Development: | | | | *Psychiatry | 120 |
| Neurosciences | 178 | Genetics | 15 | | | *Dermatology | 40 |
| Correlation Clinics | 64 | Introduction to Psychopathology | 32 | | | *Ophthalmology | 40 |
| Psychic Growth and Development | 12 | Pediatrics | 3 | | | *Otolaryngology | 40 |
| Biostatistics | 20 | Obstetrics and Gynecology | 18 | | | Preventive Medicine | |
| Tutorial | 36 | | | | | Course | 70 |
| | | | | | | Survey | 50 |
| | | | | | | Legal Medicine | 13 |
| | | | | Principal Clinical Year (48 weeks) | | Elective Period (22 weeks) | 946 |
| | | | | *Medicine | 480 | | |
| | | | | *Surgery | 480 | | |
| | | | | *Obstetrics and Gynecology | 240 | | |

† A multidepartmental integrated course which includes Examination of the Patient (Medicine and Surgery) and Laboratory Diagnosis.

* Clerkships.

# HARVARD MEDICAL SCHOOL

## Plan of Instruction

### First Year

| Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | April | May | June | July | Aug. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | GROSS ANATOMY<br>CELLULAR BIOCHEMISTRY<br>CIRCULATORY PHYSIOLOGY<br>GENERAL HISTOLOGY AND CYTOLOGY | | | | RESPIRATION, KIDNEY, AND BODY FLUIDS<br>BIOSTATISTICS | GASTRO-INTESTINAL AND ENDOCRINE SYSTEMS | | NEURO-SCIENCES<br>PSYCHIC GR. & DEV. | | VACATION<br>RESEARCH VOLUNTARY WORK | |

### Second Year

| Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | April | May | June | July | Aug. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| VACATION | BACTERIOLOGY<br>PATHOLOGY<br>PHARMACOLOGY<br>GENETICS | | | PARASITOLOGY | PATHOPHYSIOLOGY<br>CASE TAKING | | | | | VACATION<br>RESEARCH VOLUNTARY WORK | |

# PLAN OF INSTRUCTION

## Third and Fourth Years

| Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | April | May | June | July | Aug. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| VACATION | Introduction to the Clinic | | | Principal Clinical Year<br>Medicine* (12 weeks)° | VACATION | | Principal Clinical Year<br>Surgery* (12 weeks)° | | | Principal Clinical Year<br>Pediatrics* (6 weeks)°<br>Obstetrics and Gynecology* (6 weeks)° | VACATION |
| VACATION | Principal Clinical Year<br>Derm. Ophth. Otol.* (3 wks.)°<br>Psych.* (3 wks.)°<br>Neur.* (3 wks.)°<br>Orth. Surg.* (3 wks.)° | | READING PERIOD | Elective Period | | | | EXAMS | | | |
| Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | April | May | June | July | Aug. |

Recess.

* Order of subjects variable.

° One afternoon per week is devoted to whole class exercises which include Legal Medicine (13 sessions) and Preventive Medicine (34 sessions).

# ANNOUNCEMENT OF COURSES

## Department of Anatomy

Don W. Fawcett, M.D., Hersey Professor of Anatomy, James Stillman Professor of Comparative Anatomy, Head of the Department, and Curator of the Warren Anatomical Museum.

Roy O. Greep, Ph.D., A.M. (hon.), S.D. (hon.), Professor of Anatomy in the School of Dental Medicine.

Sanford L. Palay, M.D., A.M. (hon.), Bullard Professor of Neuroanatomy.

Edward A. Edwards, M.D., Associate Clinical Professor of Anatomy.

Elizabeth D. Hay, M.D., A.M. (hon.), Louise Foote Pfeiffer Associate Professor of Embryology.

Jean-Paul Revel, Ph.D., Associate Professor of Anatomy.

S. James Adelstein, M.D., Ph.D., Assistant Professor of Anatomy and Philip H. Cook Fellow in Radiology.

Jay B. Angevine, Jr., Ph.D., Assistant Professor of Anatomy.

Susumu Ito, Ph.D., Assistant Professor of Anatomy.

Charles P. Lyman, Ph.D., Assistant Professor of Anatomy (part time).

Willard D. Roth, Ph.D., Assistant Professor of Anatomy.

George Szabo, Ph.D., Assistant Professor of Anatomy in the Department of Dermatology.

Richard E. Coggeshall, M.D., Associate in Anatomy.

Donald K. Morest, M.D., Associate in Anatomy.

Sergei P. Sorokin, M.D., Associate in Anatomy, and Tutor in Anatomy.

Elias E. Manuelidis, M.D., A.M. (hon.), Visiting Lecturer on Neuroanatomy (from September 1, 1966).

George Paff, Ph.D., Visiting Lecturer on Anatomy (from January 1, 1967).

David W. Hamilton, Ph.D., Instructor in Anatomy.

Albert L. Jones, M.D., Instructor in Anatomy.
Elizabeth Taber-Pierce, Ph.D., Instructor in Anatomy.
Merrill K. Wolf, M.D., Instructor in Anatomy.
David E. Wolfe, M.D., Instructor in Anatomy.
William B. Warr, Ph.D., Assistant in Neuroanatomy (from January 1, 1967).
Ita R. K. Abramof, Ph.D., Research Fellow in Anatomy.
Augustin Aoki, M.D., Research Fellow in Anatomy (through August 31, 1966).
James D. Deck, Ph.D., Research Fellow in Anatomy (through August 31, 1966).
Robert M. Herndon, M.D., Research Fellow in Anatomy (resigned August 31, 1966).
Marijke E. Holtrop, Ph.D., Research Fellow in Anatomy.
Francis J. Manasek, D.M.D., Research Fellow in Anatomy.
N. Scott McNutt, M.D., Research Fellow in Anatomy.
Lorna K. Mee, Ph.D., Research Fellow in Anatomy (through September 30, 1966).
Taisuke Nakao, M.D., Research Fellow in Anatomy (from October 1, 1966).
Paula M. Orkand, Ph.D., Research Fellow in Anatomy.
David Phillips, Ph.D., Research Fellow in Anatomy (from September 1, 1966).
Thomas S. Reese, M.D., Research Fellow in Anatomy (resigned August 31, 1966).
Constantino Sotelo, M.D., Ph.D., Research Fellow in Anatomy
Robert D. Staton, M.S., Research Fellow in Anatomy.
Lily S. Tashima, Ph.D., Research Fellow in Anatomy.
Lucas S. Van Orden, 3d, M.D., Ph.D., Research Fellow in Anatomy (from September 1, 1966).
Britta von Gaudecker, D.Nat., Research Fellow in Anatomy.
Raymond B. Wuerker, M.D., Research Fellow in Anatomy.

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Affiliated:
James D. Robertson, M.D. Lecturer on Neuropathology.
Jesse F. Scott, M.D., Associate Professor of Oncologic Medicine.

RICHARD L. SIDMAN, M.D., Assistant Professor of Neuropathology.
BENJAMIN SPECTOR, M.D., Coordinator of Anatomical Materials.

The Department of Anatomy offers instruction in gross human anatomy, histology and cytology, embryology, and neuroanatomy. Opportunities are also afforded for advanced work and research in these subjects. The Department occupies the Morgan Anatomical Building in the first three floors of the wing designated as B1, and the first two floors of B2. This space includes offices and research laboratories of the staff, rooms for graduate students and fellows, seminar rooms, a photographic department and laboratories devoted to cytochemistry, tissue culture, and electron microscopy.

There is a large departmental library containing complete files of the important journals in the fields of anatomy, developmental biology, and experimental cytology, together with many standard textbooks and works of reference. The library is open to staff, students and others, on a non-circulating basis.

The Minot Embryological Collection is a unique feature of the laboratory. It comprises approximately twenty-three hundred series of sections of selected vertebrate embryos representing a wide range of species and therefore affords opportunities for research in comparative embryology such as cannot be found elsewhere.

The Department also has valuable neurological material for both teaching and research, including two entire human brains cut serially in the transverse and horizontal planes, with the sections alternately stained by the Pal-Weigert and Nissl methods.

## *Required Courses*

ANATOMY A AND B. *First Year.* — The courses of the first year are intended to teach human anatomy, both gross and microscopic, together with the essentials of human embryology and neurology.

In the study of gross anatomy, students make a complete dissection of the human body in the second semester. Four students are assigned to the same body, and work together during the course. The study of the skeleton is carried on concurrently with the dissection, and each student is provided with a box of bones which may be kept throughout the course. There are lectures and demonstrations which

serve to emphasize the clinical application of gross anatomical relations and to teach certain aspects of human biology not adequately treated in the textbooks. Special dissections and various anatomical specimens and preparations are displayed to supplement the student's own dissections.

That part of the course in microscopic anatomy given in the first semester is intended to give the student familiarity with the normal structure of cells and tissues as they appear under light microscope and with their finer structure as revealed by the electron microscope. The histology presented in the second semester forms part of the correlative teaching in which the structure, physiology, and biochemistry of the gastrointestinal tract and endocrine glands are studied.

Embryology is taught in conjunction with histology in a series of lectures in the first semester.

Neuroanatomical instruction is given as a part of the section of correlative teaching in the second semester designated Neurosciences.

| FIRST YEAR | HOURS |
|---|---|
| Lectures. Drs. Fawcett, Palay, Edwards, Hay, Szabo, Adelstein, Angevine, Ito, Revel, Roth, Sorokin, Coggeshall, Hamilton, and Morest. | |
| Demonstrations. To sections of the class, at the pleasure of the instructors. | |
| Laboratory work. | 372 |

## *Fourth Year Elective Courses* *

### BLOCK COURSES

501. Surgical Anatomy. Dr. Edwards and Associates. (*Same course as Anatomy 203, Faculty of Arts and Sciences.*)
502. Comparative Vertebrate Physiology. Dr. Lyman and Associates. (*Same course as Anatomy 205, Faculty of Arts and Sciences.*)

### BLOCK COURSES — RESEARCH

801. Cytology and Cell Ultrastructure. Dr. Fawcett. (*Same course as Anatomy 301, Faculty of Arts and Sciences.*)
802. Biology of Reproduction. Dr. Greep. (*Same course as Anatomy 302, Faculty of Arts and Sciences.*)

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

803. Advanced Neuroanatomy and Neurocytology. Dr. PALAY. (*Same course as Anatomy 303, Faculty of Arts and Sciences.*)
804. Surgical Anatomy. Dr. EDWARDS. (*Same course as Anatomy 304, Faculty of Arts and Sciences.*)
805. Experimental Embryology; Developmental Cytology. Dr. HAY. (*Same course as Anatomy 305, Faculty of Arts and Sciences.*)
806. Cytology and Cell Ultrastructure. Dr. ITO. (*Same course as Anatomy 306, Faculty of Arts and Sciences.*)
807. Environmental and Comparative Physiology. Dr. LYMAN. (*Same course as Anatomy 307, Faculty of Arts and Sciences.*)
808. Cytochemistry; Experimental Cytology. Dr. REVEL. (*Same course as Anatomy 308, Faculty of Arts and Sciences.*)
809. Biology of Skin and Pigmentation. Dr. SZABO. (*Same course as Dermatology 807 and same course as Anatomy 309, Faculty of Arts and Sciences.*)
810. Biochemical Cytology; Radiation Biology. Dr. ADELSTEIN. (*Same course as Anatomy 310, Faculty of Arts and Sciences.*)
811. Advanced Neuroanatomy and Neurogenesis. Dr. ANGEVINE. (*Same course as Anatomy 311, Faculty of Arts and Sciences.*)
812. Endocrinology of Reproduction. Dr. ARMSTRONG. (*Same course as Anatomy 312, Faculty of Arts and Sciences.*)
813. Advanced Neuroanatomy; Thalamus and Sensory Systems. Dr. MOREST. (*Same course as Anatomy 313, Faculty of Arts and Sciences.*)
814. Comparative Endocrinology and Neuroendocrinology. Dr. ROTH. (*Same course as Anatomy 314, Faculty of Arts and Sciences.*)
815. Histochemistry. Dr. SOROKIN. (*Same course as Anatomy 315, Faculty of Arts and Sciences.*)

LONGITUDINAL COURSES

701. Advanced Cytology. Dr. FAWCETT and ASSOCIATES. (*Same course as Anatomy 206, Faculty of Arts and Sciences.*) Not offered in 1966–1967.
702. Developmental Biology. Dr. HAY and ASSOCIATES. (*Same course as Anatomy 207, Faculty of Arts and Sciences*).
703. Advanced Neurocytology. Dr. PALAY and ASSOCIATES. (*Same course as Anatomy 208, Faculty of Arts and Sciences.*) Not offered in 1966–1967.

## Department of Bacteriology and Immunology

Bernard D. Davis, M.D., Adele Lehman Professor of Bacteriology and Immunology, and Head of the Department.

Albert H. Coons, M.D., Career Investigator of the American Heart Association, and Visiting Professor of Bacteriology and Immunology.

John F. Enders, Ph.D., University Professor.

Luigi Gorini, Ph.D. (Equiv.), A.M. (hon.), American Cancer Society Professor of Bacteriology and Immunology.

Harold Amos, Ph.D., Associate Professor of Bacteriology and Immunology.

Monroe D. Eaton, M.D., Associate Professor of Bacteriology and Immunology.

Mahlon B. Hoagland, M.D., Associate Professor of Bacteriology and Immunology, and Ruby Boyer Miller Fellow in Medical Research, and Tutor in Bacteriology and Immunology.

Edward H. Kass, Ph.D., M.D., A.M. (hon.), Sc.D. (hon.), Associate Professor of Bacteriology and Immunology.

Jonathan R. Beckwith, Ph.D., Assistant Professor of Bacteriology and Immunology.

Donald T. Dubin, M.D., Assistant Professor of Bacteriology and Immunology.

Howard Goldfine, Ph.D., Assistant Professor of Bacteriology and Immunology.

Barbara W. Kalckar, Ph.D., Assistant Professor of Bacteriology and Immunology at the Massachusetts General Hospital (from January 1, 1967).

Sidney Leskowitz, Ph.D., Assistant Professor of Bacteriology and Immunology at the Massachusetts General Hospital.

Mortimer Litt, M.D., Assistant Professor of Bacteriology and Immunology.

Hiroshi Nikaido, M.D., Assistant Professor of Bacteriology and Immunology at the Massachusetts General Hospital.

Elmer R. Pfefferkorn, Ph.D., Silas Arnold Houghton Assistant Professor of Bacteriology and Immunology.

Charles T. Ambrose, M.D., Associate in Bacteriology and Immunology.

Julian E. Davies, Ph.D., Associate in Bacteriology and Immunology (on leave September 1, 1966 through August 31, 1967).

Dan G. Fraenkel, Ph.D., Associate in Bacteriology and Immunology.

Lawrence J. J. Kunz, Ph.D., Associate in Bacteriology and Immunology at the Massachusetts General Hospital.

Jeana D. Levinthal, M.D., Associate in Bacteriology and Immunology (on leave September 1, 1966 through June 30, 1967).

Chandra R. Amarasingham, M.D., Research Associate in Bacteriology and Immunology.

Janine A. Andre-Schwartz, M.D., Research Associate in Bacteriology and Immunology.

Muthiah D. Daniel, Ph.D., Research Associate in Bacteriology and Immunology.

Edward F. deBono, M.D., Ph.D., Research Associate in Bacteriology and Immunology (resigned November 30, 1966).

Harvey A. Elder, M.D., Research Associate in Bacteriology and Immunology.

Iolanda E. Low, M.D., Research Associate in Bacteriology and Immunology.

Luis Melendez, D.V.M., Research Associate in Bacteriology and Immunology.

Lawrence M. B. Razavi, M.B., B.S., Research Associate in Bacteriology and Immunology.

Peter C. Reade, Ph.D., Research Associate in Bacteriology and Immunology (from January 1, 1967).

Micheline M. Roth, M.D., Research Associate in Bacteriology and Immunology.

Barbara K. Watson, Ph.D., Research Associate in Bacteriology and Immunology.

Hugh O. McDevitt, M.D., Instructor in Bacteriology and Immunology (through August 31, 1966).

Alice K. Daly, S.B., Assistant in Bacteriology and Immunology.

Joan B. Daniels, S.B., Assistant in Bacteriology and Immunology.

Alice McDonald, A.B., Assistant in Bacteriology and Immunology.

Jacob Aronovitch, Ph.D., Research Fellow in Bacteriology and Immunology.

Paul Baumann, Ph.D., Research Fellow in Bacteriology and Immunology (from November 1, 1966).

Richard C. Blinkoff, Ph.D., Research Fellow in Bacteriology Immunology.

Boyce W. Burge, Ph.D., Harold C. Ernst Research Fellow in Bacteriology and Immunology (from November 1, 1966).

Marc H. Dresden, Ph.D., Harold C. Ernst Research Fellow in Bacteriology and Immunology (through July 31, 1966).

Michael A. Edidin, Ph.D., Research Fellow in Bacteriology and Immunology (through August 31, 1966).

Elliot Goldstein, M.D., Research Fellow in Bacteriology and Immunology (through August 8, 1966).

Samuel Goldstein, M.D., Research Fellow in Bacteriology and Immunology (from September 1, 1966).

Alton Gunalp, M.D., Research Fellow in Bacteriology and Immunology (through August 31, 1966).

Per Otto Hagen, M.D., Research Fellow in Bacteriology and Immunology (resigned July 31, 1966).

Michel A. Horisberger, Ph.D., Research Fellow in Bacteriology and Immunology (from January 1, 1967).

James R. Hughes, M.D., Research Fellow in Bacteriology and Immunology.

George A. Jacoby, M.D., Research Fellow in Bacteriology and Immunology.

H. Olle Karlstrom, Ph.D., Research Fellow in Bacteriology and Immunology (through August 15, 1966).

Robert E. Kohler, Jr., Ph.D., Research Fellow in Bacteriology and Immunology.

Otohiko Kunii, M.D., Research Fellow in Bacteriology and Immunology.

Thomas A. McAllister, M.B., Ch.B., Research Fellow in Bacteriology and Immunology.

Arnold Meisler, M.D., Research Fellow in Bacteriology and Immunology.

Juan B. Modolell, Ph.D., Research Fellow in Bacteriology and Immunology (from January 1, 1967).

Carl Norden, M.D., Research Fellow in Bacteriology and Immunology.

Graciela M. Peyru, M.D., Research Fellow in Bacteriology and Immunology (from November 1, 1966).

Patrick J. Piggot, Ph.D., Research Fellow in Bacteriology and Immunology (from September 1, 1966).

Roger V. Quincey, Ph.D., Research Fellow in Bacteriology and Immunology (from October 1, 1966).

Liane Reif, Ph.D., Research Fellow in Bacteriology and Immunology (through September 14, 1966).

Joan P. Roscoe, Ph.D., Research Fellow in Bacteriology and Immunology.

Roland Rosset, Ph.D., Research Fellow in Bacteriology and Immunology (from October 1, 1966).

David Rush, M.D., Research Fellow in Bacteriology and Immunology (through December 31, 1966).

John G. Scaife, Ph.D., Research Fellow in Bacteriology and Immunology.

Dinesh P. Sinha, M.D., Research Fellow in Bacteriology and Immunology.

Philip F. Sparling, M.D., Research Fellow in Bacteriology and Immunology.

Paolo F. Strigini, M.D., Research Fellow in Bacteriology and Immunology.

Yoshifumi Takeda, M.D., Research Fellow in Bacteriology and Immunology (resigned August 31, 1966).

Burton E. Tropp, Ph.D., Research Fellow in Bacteriology and Immunology.

Ryosuke Yuasa, M.D., Research Fellow in Bacteriology and Immunology (from September 1, 1966).

Robert A. Zimmermann, Ph.D., Research Fellow in Bacteriology and Immunology.

James N. Wilfert, M.D., Teaching Fellow in Bacteriology and Immunology.

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Affiliated:

John C. Snyder, M.D., Professor of Public Health Bacteriology, and Dean of the School of Public Health.

Thomas H. Weller, M.D., LL.D., Richard Pearson Strong Professor of Tropical Health in the School of Public Health.

Charlotte C. Campbell, S.B., Associate Professor of Medical Mycology, S.P.H.

K. Frank Austen, M.D., Associate Professor of Medicine at the Robert B. Brigham Hospital.

Ronald J. Gibbons, Ph.D., Assistant Professor of Bacteriology at the Forsyth Dental Infirmary for Children.

Thomas J. Gill, 3d, M.D., Assistant Professor of Pathology.

Edgar Haber, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

Samuel L. Katz, M.D., Assistant Professor of Pediatrics at The Children's Hospital.

Sigmund S. Socransky, D.D.S., Assistant Professor of Periodontology at the Forsyth Dental Infirmary for Children.

Morton N. Swartz, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

Henry J. Winn, M.D., Assistant Professor of Bacteriology and Immunology in the Department of Surgery at the Massachusetts General Hospital.

Kurt J. Bloch, M.D., Associate in Medicine at the Massachusetts General Hospital.

Fred S. Rosen, M.D., Assistant Professor of Pediatrics at The Children's Hospital.

David S. Feingold, M.D., Associate in Medicine at the Beth Israel Hospital.

## *Required Course*

Bacteriology A. *Second Year.* — This course consists of lectures, laboratory exercises, and conferences, designed to acquaint the student with the principles of bacteriology, virology, immunology, allergy, and chemotherapy. The fungi will also be briefly considered.

The first part of the course consists of an introduction to general microbiology, including the structure, physiology, metabolism, and genetics of bacteria and bacteriophage. Attention will then be given to the agents of infectious disease, with emphasis on properties that are useful in their identification and in understanding their pathogenicity. The exercises on host-parasite relations and allergy will be correlated with pathology, while those on chemotherapy will be correlated with pharmacology. Clinics held in various hospitals will introduce the student to infectious disease in man.

While the course is designed primarily as a preparation for later clinical work on infectious disease, considerable attention will also be given to illustrating the use of unicellular organisms in studying problems of cell physiology and molecular biology common to all cells, including those of man.

| SECOND YEAR | HOURS |
|---|---|
| Lectures, laboratory work, and conferences. Dr. Davis and Staff. First half-year. Most exercises take place on Monday, Wednesday, and Friday afternoons with conferences on Saturday mornings. | 168 |

## *Fourth Year Elective Courses* *

BLOCK COURSES —RESEARCH

801. Bacterial Metabolism; Chemotherapy. Dr. Davis. (*Same course as Bacteriology 301, Faculty of Arts and Sciences.*)
802. Immunology and Immunochemistry. Dr. Coons. (*Same course as Bacteriology 304, Faculty of Arts and Sciences.*)
803. Virology. Dr. Enders. (*Same course as Bacteriology 303, Faculty of Arts and Sciences.*)

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

804. Bacterial Physiology; Control of Biosynthesis. Dr. Gorini. (*Same course as Bacteriology 310, Faculty of Arts and Sciences.*)
805. Macromolecule Synthesis in Animal Cells. Dr. Amos. (*Same course as Bacteriology 308, Faculty of Arts and Sciences.*)
806. Virology. Dr. Eaton. (*Same course as Bacteriology 302, Faculty of Arts and Sciences.*)
807. Protein Synthesis and its Control. Dr. Hoagland. (*Same course as Bacteriology 314, Faculty of Arts and Sciences.*)
808. Medical Bacteriology. Dr. Kass.
809. Bacterial Genetics. Dr. Beckwith.
811. Bacterial Metabolism. Dr. Fraenkel.
812. Bacterial Lipids and Membranes. Dr. Goldfine. (*Same course as Bacteriology 305, Faculty of Arts and Sciences.*)
813. Immunochemistry. Dr. Leskowitz.
814. Viruses and Animal Cells. Dr. Pfefferkorn.

LONGITUDINAL COURSES

701. Immunology. Drs. Coons, K. F. Austen, Leskowitz, and Gill. (*Same course as Bacteriology 207, Faculty of Arts and Sciences.*)
702. General Virology. Drs. Eaton, Amos, and Pfefferkorn. (*Same course as Bacteriology 206, Faculty of Arts and Sciences.*)
703. Microbial and Molecular Genetics. Dr. Davis and Associates. (*Same course as Bacteriology 208, Faculty of Arts and Sciences.*)

## Department of Biological Chemistry

Elkan R. Blout, Ph.D., A.M. (hon.), Edward S. Harkness Professor of Biological Chemistry, and Head of the Department.

Eric G. Ball, Ph.D., S.D. (hon.), A.M. (hon.), Edward S. Wood Professor of Biological Chemistry, and Chairman of the Division of Medical Sciences of the Faculty of Arts and Sciences.

Lewis L. Engel, Ph.D., Professor of Biological Chemistry and Permanent Faculty Fellow of the American Cancer Society.

Jordi Folch-Pi, M.D., A.M. (hon.), Professor of Neurochemistry at the McLean Hospital.

Herman M. Kalckar, M.D., Ph.D., A.M. (hon.), D.Sc. (hon.), Professor of Biological Chemistry at the Massachusetts General Hospital.

Manfred L. Karnovsky, Ph.D., A.M. (hon.), Harold T. White Professor of Biological Chemistry, and Secretary of the Faculty of Medicine.

Eugene P. Kennedy, Ph.D., A.M. (hon.), Hamilton Kuhn Professor of Biological Chemistry.

Bert L. Vallee, M.D., A.M. (hon.), Paul C. Cabot Professor of Biological Chemistry.

Claude A. Villee, Jr., Ph.D., A.M. (hon.), Andelot Professor of Biological Chemistry, and Tutor in Biological Chemistry.

Roger W. Jeanloz, D.Sc., A.M. (hon.), Associate Professor of Biological Chemistry at the Massachusetts General Hospital.

Walter E. Knox, M.D., Associate Professor of Biological Chemistry at the New England Deaconess Hospital.

*Arthur K. Solomon, Ph.D., D.Phil., Associate Professor of Biophysics.

Joseph B. Alpers, M.D., Assistant Professor of Biological Chemistry.

John L. Bethune, Ph.D., Assistant Professor of Biological Chemistry at the Peter Bent Brigham Hospital.

* Appointment under the Committee on Medical Research in Biophysics.

Donald G. Comb, Ph.D., Assistant Professor of Biological Chemistry.

John Gergely, M.D., Ph.D., Assistant Professor of Biological Chemistry (part time).

Dwain D. Hagerman, M.D., Assistant Professor of Biological Chemistry at the Boston Hospital for Women (Parkway Division), and Tutor in Biological Chemistry (resigned December 31, 1966).

Standish C. Hartman, Ph.D., Assistant Professor of Biological Chemistry.

George Hauser, Ph.D., Assistant Professor of Biological Chemistry at the McLean Hospital.

Edmund C. C. Lin, Ph.D., Assistant Professor of Biological Chemistry.

Susan Lowey, Ph.D., Assistant Professor of Biological Chemistry at The Children's Hospital.

Charles C. Richardson, M.D., Assistant Professor of Biological Chemistry.

Sidney V. Rieder, Ph.D., Assistant Professor of Biological Chemistry at the Massachusetts General Hospital.

Robert G. Spiro, M.D., Assistant Professor of Biological Chemistry at the Peter Bent Brigham Hospital.

Donald F. H. Wallach, M.D., Assistant Professor of Biological Chemistry.

Pierre J. Stoffyn, Ph.D., Lecturer on Biological Chemistry at the McLean Hospital.

Robert A. Darrow, Ph.D., Associate in Biological Chemistry at the Massachusetts General Hospital (resigned February 15, 1967).

Cliffe D. Joel, Ph.D., Associate in Biological Chemistry.

Robert L. Jungas, Ph.D., Associate in Biological Chemistry.

Lewis C. Mokrasch, Ph.D., Associate in Biological Chemistry at the McLean Hospital.

Henry P. Paulus, Ph.D., Associate in Biological Chemistry.

William J. Reddy, D.Sc., Associate in Biological Chemistry at the Peter Bent Brigham Hospital.

James F. Riordan, Ph.D., Associate in Biological Chemistry.

James P. Koch, M.D., Lecturer on Biological Chemistry.

Elizabeth R. Simons, Ph.D., Lecturer on Biological Chemistry.

Robert J. P. Williams, Ph.D., Visiting Lecturer on Biological Chemistry (from September 1, 1966).

Anil K. Bhattacharyya, D.Phil., Research Associate in Biological Chemistry.

Thomas L. Coombs, Ph.D., Research Associate in Biological Chemistry.

Kaney Ebisuzaki, Ph.D., Research Associate in Biological Chemistry.

Joseph Eichberg, Jr., Ph.D., Research Associate in Biological Chemistry.

John M. Franz, Ph.D., Research Associate in Biological Chemistry (through September 15, 1966).

Shou-Cheng J. Fu, Ph.D., Research Associate in Biological Chemistry.

Keiichiro Fuwa, Ph.D., Research Associate in Biological Chemistry.

Olga F. Greengard, Ph.D., Research Associate in Biological Chemistry.

Sen-itiro Hakomori, M.D., Research Associate in Biological Chemistry (resigned October 31, 1966).

Kohei Hayashi, M.D., Ph.D., Research Associate in Biological Chemistry (from October 1, 1966).

George E. Hein, Ph.D., Research Associate in Biological Chemistry (from September 1, 1966).

Otomatsu Hoshino, D.P.Sc., Research Associate in Biological Chemistry (resigned September 30, 1966).

Mervyn Israel, Ph.D., Research Associate in Biological Chemistry.

Charles R. Jenkin, Ph.D., Research Associate in Biological Chemistry (through July 31, 1966).

Harry J. Karavolas, Ph.D., Research Associate in Biological Chemistry.

Walter A. Kornicker, Ph.D., Research Associate in Biological Chemistry.

Kichang Kum, M.D., Ph.D., Research Associate in Biological Chemistry.

Marjorie B. Lees, Ph.D., Research Associate in Biological Chemistry (from September 1, 1966).

George Loutfi, M.D., Research Associate in Biological Chemistry (resigned September 10, 1966).

Aron O. Lurie, M.B., Ch.B., Ph.D., Research Associate in Biological Chemistry.

Johannes A. Meienhofer, Dr.Nat., Research Associate in Biological Chemistry.

Ezio Merler, Ph.D., Research Associate in Biological Chemistry.

James C. Orr, Ph.D., Research Associate in Biological Chemistry.

Erika E. Randerath, Ph.D., Research Associate in Biological Chemistry.

Annette M. C. Rapin, Ph.D., Research Associate in Biological Chemistry.

Glyn P. Roberts, Ph.D., Research Associate in Biological Chemistry.

Andre Rosowsky, M.D., Research Associate in Biological Chemistry.

Wan-Kyng L. Shum, Ph.D., Research Associate in Biological Chemistry.

Mordechai Sokolovsky, Ph.D., Research Associate in Biological Chemistry.

S. Sridhara, Ph.D., Research Associate in Biological Chemistry (from February 1, 1967).

Nikola Z. Stanacev, Ph.D., Research Associate in Biological Chemistry.

Anne M. Stoffyn, Ph.D., Research Associate in Biological Chemistry.

George H. Tait, Ph.D., Research Associate in Biological Chemistry.

Shuji Tanaka, M.D., Research Associate in Biological Chemistry.

Helmut F. Weicker, M.D., Research Associate in Biological Chemistry (through March 31, 1967).

Tai T. Wu, Ph.D., Research Associate in Biological Chemistry (resigned December 31, 1966).

Elvera Algeri Glass, S.B., Assistant in Biological Chemistry.

Stelios Aktipis, Ph.D., Research Fellow in Biological Chemistry (through September 30, 1966).

David S. Auld, Ph.D., Research Fellow in Biological Chemistry (from November 1, 1966).

Nicholas G. Bazan, M.D., Research Fellow in Biological Chemistry (from October 1, 1966).

Alexander U. Bertland, Ph.D., Research Fellow in Biological Chemistry.

Robert H. Cagan, A.M., Research Fellow in Biological Chemistry (resigned August 31, 1966).

James R. Carter, Jr., M.D., Research Fellow in Biological Chemistry (through December 31, 1966).

Toby M. Chapman, Ph.D., Research Fellow in Biological Chemistry.

Eduardo H. Charreau, Ph.D., Research Fellow in Biological Chemistry (from November 1, 1966).

Philipp Christen, M.D., Research Fellow in Biological Chemistry (from January 15, 1967).

Vilmos Csanyi, Ph.D., Research Fellow in Biological Chemistry (from September 15, 1966).

Richard C. Davies, D. Phil., Research Fellow in Biological Chemistry.

William D. Denckla, M.D., Research Fellow in Biological Chemistry.

Ivan Diamond, M.D., Research Fellow in Biological Chemistry (from January 1, 1967).

Charles H. Doering, Ph.D., Research Fellow in Biological Chemistry.

John T. Dunn, M.D., Research Fellow in Biological Chemistry (through August 31, 1966).

Mary M. Eichhorn, Ph.D., Research Fellow in Biological Chemistry (through September 15, 1966).

James Ellingboe, Ph.D., Research Fellow in Biological Chemistry (through August 31, 1966).

Daina Z. Ewton, Ph.D., Research Fellow in Biological Chemistry (from November 15, 1966).

Charles F. Fox, Ph.D., Research Fellow in Biological Chemistry (through September 30, 1966).

Ralph R. Francesconi, Ph.D., Research Fellow in Biological Chemistry (from September 1, 1966).

Tomoko Fujii, D.M.S., Research Fellow in Biological Chemistry.

Suguru Fukushi, M.D., Ph.D., Research Fellow in Biological Chemistry.

Alan G. Goodridge, Ph.D., Research Fellow in Biological Chemistry (through July 31, 1966).

Adrienne S. Gordon, Ph.D., Research Fellow in Biological Chemistry (from October 1, 1966).

Paul H. Gross, Dr.Sc., Research Fellow in Biological Chemistry.

Carole L. Hall, Ph.D., Research Fellow in Biological Chemistry (from September 15, 1966).

John H. Harrison, IV, Ph.D., Research Fellow in Biological Chemistry.

Robert W. Henkens, Ph.D., Research Fellow in Biological Chemistry (from November 1, 1966).

Maria L. Horowitz, Ph.D., Research Fellow in Biological Chemistry (from September 1, 1966).

Jeong H. Im, Ph.D., Research Fellow in Biological Chemistry (from August 1, 1966).

Alain G. Jacquemin-Sablon, Ph.D., Research Fellow in Biological Chemistry (from March 1, 1967).

Kunthala Jayaraman, Ph.D., Research Fellow in Biological Chemistry.

Peteranne B. Joel, Ph.D., Research Fellow in Biological Chemistry.

Theodore H. D. Jones, Ph.D., Research Fellow in Biological Chemistry (from October 1, 1966).

Herbert M. Kagan, Ph.D., Research Fellow in Biological Chemistry.

Junzo Kato, M.D., Research Fellow in Biological Chemistry (through September 15, 1966).

Afzal A. Khan, Ph.D., Research Fellow in Biological Chemistry (through December 31, 1966).

Peter Kneer, M.D., Research Fellow in Biological Chemistry.

Toshimasa Kojima, Ph.D., Research Fellow in Biological Chemistry (from September 1, 1966).

Yutaka Kojima, M.D., Ph.D., Research Fellow in Biological Chemistry.

Melodee S. Kornacker, Ph.D., Research Fellow in Biological Chemistry.

Daniel Laufer, Ph.D., Research Fellow in Biological Chemistry (through August 31, 1966).

Jorge A. Leston, M.D., Research Fellow in Biological Chemistry (from September 1, 1966).

Gian P. Lorenzi, D.Sc., Research Fellow in Biological Chemistry.

Rhoda K. Makoff, Ph.D., Research Fellow in Biological Chemistry (through August 15, 1966).

David I. Marlborough, Ph.D., Research Fellow in Biological Chemistry (from October 1, 1966).

Norman R. Marquis, Ph.D., Research Fellow in Biological Chemistry.

Edoardo Menini, Ph.D., Research Fellow in Biological Chemistry (resigned January 9, 1967).

Robert H. Michell, Ph.D., Research Fellow in Biological Chemistry (from September 1, 1966).

Alexander Neville, M.B., Ch.B., Ph.D., Research Fellow in Biological Chemistry.

Yang H. Oh, Ph.D., Research Fellow in Biological Chemistry (from September 1, 1966).

Alfred F. Parisi, M.D., Research Fellow in Biological Chemistry.

Peter Perchemlides, Ph.D., Research Fellow in Biological Chemistry.

Romano Piras, Ph.D., Research Fellow in Biological Chemistry resigned October 31, 1966).

Jacques R. Poortmans, Ph.D., Research Fellow in Biological Chemistry.

Eliezer S. Rachamian, Ph.D., Research Fellow in Biological Chemistry.

Nilima Sarkar, Ph.D., Research Fellow in Biological Chemistry.

Francisco G. Sastre, M.D., Research Fellow in Biological Chemistry (from October 1, 1966).

Gene A. Scarborough, Ph.D., Research Fellow in Biological Chemistry (from January 1, 1967).

Ekkehard Schillinger, Ph.D., Research Fellow in Biological Chemistry.

Guido A. Schoenenberger, M.D., Research Fellow in Biological Chemistry.

Peter Schofield, D.Phil., Research Fellow in Biological Chemistry.

David S. Sigman, Ph.D., Research Fellow in Biological Chemistry (from October 1, 1965).

Pierre G. Sinay, Ph.D., Research Fellow in Biological Chemistry (from September 15, 1966).

Masami Suzuki, Ph.D., Research Fellow in Biological Chemistry.

Manning M. Thaler, M.D., Research Fellow in Biological Chemistry.

Ambika J. Tolani, Ph.D., Research Fellow in Biological Chemistry (resigned October 31, 1966).

George C. Tremblay, Ph.D., Research Fellow in Biological Chemistry (resigned August 31, 1966).

Su-Chen S. Tsai, Ph.D., Research Fellow in Biological Chemistry (resigned August 31, 1966).

Vishnu M. Vaidya, Ph.D., Research Fellow in Biological Chemistry.

Subbiah Venkataraman, Ph.D., Research Fellow in Biological Chemistry.

Bernard Weiss, M.D., Research Fellow in Biological Chemistry.

Henry Chi Ping Wu, M.B., Research Fellow in Biological Chemistry (through August 31, 1966).

Stringner S. Yang, Ph.D., Research Fellow in Biological Chemistry (from November 1, 1966).

Tova Zehavi, Ph.D., Research Fellow in Biological Chemistry (through January 31, 1967).

Uri Zehavi, Ph.D., Research Fellow in Biological Chemistry.

Noe Zwaig, Ph.D., Research Fellow in Biological Chemistry.

David E. Drum, M.D., Teaching Fellow in Biological Chemistry.

Herbert A. Klein, M.D., Teaching Fellow in Biological Chemistry.

Joseph R. Parrish, Jr., S.B., Teaching Fellow in Biological Chemistry.

Robert T. Simpson, M.D., Teaching Fellow in Biological Chemistry.

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Affiliated:

Finn Brudevold, D.D.S., A.M. (hon.), Professor of Dentistry at the Forsyth Dental Infirmary for Children.

George Nichols, Jr., M.D., Clinical Professor of Medicine.

James H. Shaw, Ph.D., Professor of Nutrition in the School of Dental Medicine.

Fredrick J. Stare, Ph.D., M.D., Professor of Nutrition, S.P.H.

D. Mark Hegsted, Ph.D., Associate Professor of Nutrition, S.P.H.

### *Required Course*

Biological Chemistry A. *First Year.* — During the first semester the lectures in Biological Chemistry discuss the chemical components of living matter and the metabolic processes common to all tissues. Laboratory work deals with the physical and chemical concepts necessary to an understanding of living processes, and the fundamental chemical characteristics of biological compounds and enzymatic reactions.

During the second semester the lectures and laboratory work in biochemistry are interwoven with those given by the Departments of

Physiology and Anatomy. The Department of Biological Chemistry will deal with the following topics: inorganic chemical composition of body tissues and fluids and physical chemical factors governing their control: the transport of $O_2$ and $CO_2$ in the blood and acid-base balance. The gastro-intestinal and endocrine systems will be studied. The Department will present the chemical processes involved in digestion and absorption; the intermediary metabolism of the liver; the chemistry and metabolism of cholesterol, the bile acids, and the steroid hormones; and the regulatory effects of hormones in general on metabolism. In the period, which explores the neuro-sciences, certain special aspects of the chemistry and metabolism of brain and nerve are the contributions of the Department of Biological Chemistry.

| FIRST YEAR | HOURS |
|---|---|
| Lectures and laboratory work. Drs. Alpers, Ball, Bethune, Blout, Comb, Darrow, Engel, Folch-Pi, Gergeley, Hagerman, Hartman, Hauser, Jeanloz, Joel, Kalckar, Karnovsky, Kennedy, Knox, Lin, Paulus, Pearlman, Reddy, Richardson, Rieder, Solomon, Spiro, Vallee, Villee, and Wallach. | 220 |

## *Fourth Year Elective Courses* *

BLOCK COURSES — RESEARCH

801. Lipid Biosynthesis and Metabolism. Dr. Kennedy.
802. Biological Oxidation, Adipose Tissue Metabolism. Dr. Ball.
803. Biological Macromolecules. Dr. Blout.
804. Neurochemistry. Dr. Folch-Pi.
805. Phosphorylated Intermediary Compounds, Carybohydrate Metabolism. Dr. Kalckar.
806. Biochemical Basis of Certain Physiological Functions; Membrane Lipids. Dr. M. L. Karnovsky.
807. Biochemistry of Embryonic Development and Cell Differentiation. Dr. C. A. Villee. (*Same course as Obstetrics and Gynecology 812.*)
808. Biochemistry of Steroids. Dr. Engel.
809. Biochemistry of Complex Polysaccharides, Glycoproteins, Glycolipids, and Bacterial Cell Walls. Dr. Jeanloz.
810. Amino Acid Metabolism, Enzymic Basis of Genetic Defects, Enzymatic Adaptation. Dr. Knox.
811. Biochemistry of Muscle. Dr. Gergely.

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

812. Biochemistry of Female Hormones. Dr. HAGERMAN.
813. Mechanisms of Enzyme Action. Dr. HARTMAN.
814. Evolution and Control of Metabolic Pathways in Bacteria. Dr. LIN.
815. Carbohydrate Metabolism. Dr. RIEDER.
816. Cellular Membranes into Neoplasia. Dr. WALLACH.
817. Carbohydrate Metabolism in Cultured Cells. Dr. ALPERS.
818. Physical Chemistry of Protein-Protein Interactions. Dr. BETHUNE.
819. Biochemistry of Differentiation. Dr. COMB.
820. Mechanisms of Enzyme Action. Dr. DARROW.
821. Biochemistry of Glycolipids and their Constituents. Dr. HAUSER.
822. Biochemistry of Lipids of Brain and Other Tissues. Dr. JOEL.
823. Peptide Biosynthesis in Bacteria. Dr. PAULUS.
824. Mechanisms of Action of Hormones. Dr. REDDY.
825. Chemistry and Metabolism of Glycoproteins. Dr. SPIRO.
826. Surgical Investigation. Dr. W. H. PEARLMAN. (*Same course as Surgery 809.*)
827. Studies of the Mechanism of Enzyme Action, Active Enzymatic Sites and Chemical Modification of Enzymes and Proteins. Dr. VALLEE.

LONGITUDINAL COURSES

701. Advanced Biochemistry. Members of the Department. (*Same course as Biochemistry 206, Faculty of Arts and Sciences.*)
702. Topics on Biochemical Evolution. Dr. LIN. (*Same course as Biochemistry 207, Faculty of Arts and Sciences.*)

## Dental Medicine

Opportunities for voluntary and elective work are available at the School of Dental Medicine for third and fourth year medical students. Course material will be designed to meet individual needs where possible. Instruction will be on a tutorial basis. Make all inquiries at the Dean's Office, School of Dental Medicine.

### *Fourth Year Elective Course* *

LONGITUDINAL COURSE

702. Child Growth and Development. Dr. Moorrees.

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

## Department of Dermatology

Thomas B. Fitzpatrick, M.D., Ph.D., Edward Wigglesworth Professor of Dermatology, and Head of the Department.

Maurice M. Tolman, M.D., Clinical Professor of Dermatology.

Irvin H. Blank, Ph.D., Assistant Professor of Dermatology at the Massachusetts General Hospital.

Irwin M. Freedberg, M.D., Assistant Professor of Dermatology at the Beth Israel Hospital, and Tutor in Medical Science.

Robert D. Griesemer, M.D., Assistant Professor of Dermatology at the Massachusetts General Hospital.

George Szabo, Ph.D., Assistant Professor of Anatomy in the Department of Dermatology.

George F. Wilgram, M.D., Ph.D., Assistant Professor of Dermatology.

Howard P. Baden, M.D., Associate in Dermatology.

Jean B. Burnett, Ph.D., Associate in Biological Chemistry in the Department of Dermatology.

Arthur Z. Eisen, M.D., Associate in Dermatology at the Massachusetts General Hospital.

Richard Masters, M.D., Ph.D., Associate in Dermatology.

Madhukar A. Pathak, Ph.D., Associate in Dermatology.

Walter F. Lever, M.D., Lecturer on Dermatology.

Walter Quevedo, Jr., Ph.D., Visiting Lecturer on Dermatology.

Mary A. Bonneville, Ph.D., Research Associate in Dermatology.

Paul F. A. Maderson, Ph.D., Research Associate in Dermatology (from August 1, 1966).

Robert Scheuplein, Ph.D., Research Associate in Dermatology.

William L. Curwen, M.D., Instructor in Dermatology.

Nicholas J. Fiumara, M.D., Instructor in Dermatology.

William R. Hill, Jr., M.D., Instructor in Dermatology.

Charles S. Keuper, M.D., Instructor in Dermatology.

Philip L. McCarthy, M.D., Instructor in Dermatology.

A. David McGugan, M.B., Ch.B., Instructor in Dermatology.

Robert F. Tilley, M.D., Instructor in Dermatology.

## DERMATOLOGY

Leroy D. Aaronson, M.D., Assistant in Dermatology.
Joseph Albert, M.D., Assistant in Dermatology.
Earl A. Glicklich, M.D., Assistant in Dermatology.
Milton E. Helman, M.D., Assistant in Dermatology.
Burnham E. Lamkins, M.D., Assistant in Dermatology.
Myron H. Matz, M.D., Assistant in Dermatology.
Sabino J. Sinesi, M.D., Assistant in Dermatology.
Arthur S. Spangler, M.D., Assistant in Dermatology.
Evelina Abuel-Bernardino, M.D., Research Fellow in Dermatology.
Stanley S. Bleehen, M.B., Ch.B., Research Fellow in Dermatology.
Rosine Bretton, M.D., Research Fellow in Dermatology (from January 1, 1967).
Yoshiaki Hori, M.D., Ph.D., Research Fellow in Dermatology (from September 1, 1966).
Dimitrios T. Kalivas, M.D., Research Fellow in Dermatology.
Martin C. Mihm, Jr., M.D., Research Fellow in Dermatology.
Masamitsu Miyamoto, M.D., Research Fellow in Dermatology.
William F. Gallagher, M.D., Teaching Fellow in Dermatology.

### *Required Course*

Dermatology. *Introduction to the Clinic* and *Principal Clinical Year.* — The courses emphasize the pathologic physiology of various diseases involving the skin and the recognition of cutaneous manifestations of systemic diseases. Instruction consists of lectures and clinical exercises at the hospitals during the Introduction to the Clinic and a clinical clerkship during the Principal Clinical Year.

| INTRODUCTION TO THE CLINIC | HOURS |
|---|---|
| Lectures and clinical exercises. B.I.H., B.C.H., M.G.H., P.B.B.H. | |
| **PRINCIPAL CLINICAL YEAR** | |
| Clinical Clerkship. M.G.H. | 40 |

## *Fourth Year Elective Courses* *

### BLOCK COURSES

501M. Dermatology I. Dr. I. Freedberg.
502M. Clinical Clerkship. Dr. Fitzpatrick and Associates.
503M. Pathology of Skin — Clinical and Microscopic Correlations. Drs. Fitzpatrick and W. Clark. (*Same course as Pathology 511M.*)

### BLOCK COURSES — RESEARCH

801. Dermatology II. Dr. I. Freedberg.
802. Research on the Biology of Skin: Melanin. Drs. Fitzpatrick, Burnett, and Szabo.
803. Research on the Biology of Skin: Keratin. Drs. Baden and Wilgram.
805. Research on the Biology of Skin: Photobiology; Biochemistry of Porphyrins. Dr. Pathak.
806. Research on the Biology of Skin: Physiology of the Skin; Protective Mechanisms. Drs. Blank and Scheuplein.
807. Biology of Skin and Pigmentation. Dr. Szabo. (*Same course as Anatomy 809.*)

### LONGITUDINAL COURSES

701. Clinical Conference and Presentation of Patients. Dr. Fitzpatrick and Associates.
702. Clinical Conference and Presentation of Patients. Dr. Tolman.
703. Seminars on Pathophysiology of Skin.
704. Neoplasms of Melanocytes and Related Problems in Cutaneous Pathology. Dr. W. Clark. (*Same course as Pathology 701.*)

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

## Department of Medicine

Maxwell Finland, M.D., D.Sc. (hon.), George Richards Minot Professor of Medicine, and Head of the Department at the Boston City Hospital.

Howard H. Hiatt, M.D., Herrman Ludwig Blumgart Professor of Medicine, and Head of the Department at the Beth Israel Hospital.

Alexander Leaf, M.D., A.M. (hon.), Jackson Professor of Clinical Medicine, and Head of the Department at the Massachusetts General Hospital.

George W. Thorn, M.D., A.M. (hon.), LL.D. (hon.), Sc.D. (hon.), Dr. of Med. (hon.), Hersey Professor of the Theory and Practice of Physic, and Head of the Department at the Peter Bent Brigham Hospital.

Paul C. Zamecnik, M.D., D.Sc. (hon.), Collis P. Huntington Professor of Oncologic Medicine, Director of the J. Collins Warren Laboratories of the Huntington Memorial Hospital, and Chairman of the Executive Committee of the Departments of Medicine.

Edward F. Bland, M.D., Clinical Professor of Medicine.

William B. Castle, M.D., S.M. (hon.), M.D. (hon.), S.D. (hon.), LL.D., Francis Weld Peabody Faculty Professor of Medicine.

Lewis Dexter, M.D., Clinical Professor of Medicine, and Tutor in Medicine.

Robert H. Ebert, Dr. Phil., M.D., A.M. (hon.), Professor of Medicine, and Dean of the Faculty of Medicine.

Laurence B. Ellis, M.D., Clinical Professor of Medicine.

Eugene C. Eppinger, M.D., Clinical Professor of Medicine.

Kurt J. Isselbacher, M.D., Professor of Medicine at the Massachusetts General Hospital.

Alfred Kranes, M.D., Clinical Professor of Medicine.

Alexander Marble, M.D., Clinical Professor of Medicine.

George Nichols, Jr., M.D., Clinical Professor of Medicine.

Thomas A. Warthin, M.D., Clinical Professor of Medicine.

Paul M. Zoll, M.D., Clinical Professor of Medicine.

Walter H. Abelmann, M.D., Associate Clinical Professor of Medicine.

K. Frank Austen, M.D., Associate Professor of Medicine at the Robert B. Brigham Hospital.

George F. Cahill, Jr., M.D., A.M. (hon.), Associate Professor of Medicine at the Peter Bent Brigham Hospital.

Charles S. Davidson, M.D., C.M., A.M. (hon.), Associate Professor of Medicine.

Kendall Emerson, Jr., M.D., Associate Clinical Professor of Medicine.

A. Stone Freedberg, M.D., Associate Professor of Medicine at the Beth Israel Hospital.

Frank H. Gardner, M.D., Associate Clinical Professor of Medicine (resigned September 30, 1966).

Irving H. Goldberg, M.D., Ph.D., A.M. (hon.), Associate Professor of Medicine.

Jerome Gross, M.D., A.M. (hon.), Associate Professor of Medicine at the Massachusetts General Hospital.

David Hurwitz, M.D., Associate Clinical Professor of Medicine.

Sidney H. Ingbar, M.D., Associate Professor of Medicine.

James H. Jandl, M.D., Associate Professor of Medicine.

George S. Kurland, M.D., Associate Clinical Professor of Medicine.

Arthur J. Linenthal, M.D., Associate Clinical Professor of Medicine.

Janet W. McArthur, M.D., S.D. (hon.), Associate Clinical Professor of Medicine.

John P. Merrill, M.D., Associate Professor of Medicine at the Peter Bent Brigham Hospital.

Marian W. Ropes, M.D., D.Sc. (hon.), Associate Clinical Professor of Medicine.

Jesse F. Scott, M.D., A.M. (hon.), Associate Professor of Oncologic Medicine (on sabbatical leave July 1, 1966 through June 30, 1967).

Charles L. Short, M.D., Associate Clinical Professor of Medicine.

Louis Zetzel, M.D., Associate Clinical Professor of Medicine.

Alan C. Aisenberg, M.D., Ph.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

David W. Allen, M.D., Assistant Professor of Medicine.

Mark D. Altschule, M.D., Assistant Clinical Professor of Medicine.

Myles P. Baker, M.D., Assistant Clinical Professor of Medicine.

Benjamin M. Banks, M.D., Assistant Clinical Professor of Medicine.

Anthony F. Bartholomay, S.D., Assistant Professor of Mathematical Biology in the Department of Medicine.

Theodore B. Bayles, M.D., Assistant Clinical Professor of Medicine.

William S. Beck, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

Frederick S. Bigelow, M.D., Assistant Clinical Professor of Medicine.

Earle M. Chapman, M.D., Assistant Clinical Professor of Medicine.

Margaret Conroy, Ph.D., Assistant Professor of Mathematical Biology in the Department of Medicine, and Tutor in Mathematical Biology.

John R. David, M.D., Assistant Professor of Medicine at the Robert B. Brigham Hospital.

Harry A. Derow, M.D., Assistant Clinical Professor of Medicine.

Daniel S. Ellis, M.D., Assistant Clinical Professor of Medicine.

Daniel D. Federman, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital, and Assistant Dean of the Faculty of Medicine for Continuing Education.

Richard A. Field, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital (resigned November 30, 1966).

Anne P. Forbes, M.D., Assistant Clinical Professor of Medicine.

Howard S. Frazier, Ph.D., M.D., Assistant Professor of Medicine at the Beth Israel Hospital.

Dale G. Friend, M.D., Assistant Professor of Medicine at the Peter Bent Brigham Hospital.

Richard Gorlin, M.D., Assistant Professor of Medicine.

Edgar Haber, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

Thomas C. Hall, M.D., Assistant Clinical Professor of Medicine.

John G. Harter, M.D., Assistant Clinical Professor of Medicine.

Roger B. Hickler, M.D., Assistant Professor of Medicine.

Frederic L. Hoch, M.D., Assistant Professor of Medicine at the Peter Bent Brigham Hospital.

Stephen M. Krane, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

Milton Landowne, M.D., Assistant Clinical Professor of Medicine.

Jacob Lerman, M.D., Assistant Clinical Professor of Medicine.

Harold D. Levine, M.D., Assistant Clinical Professor of Medicine.

David Littmann, M.D., Assistant Clinical Professor of Medicine.

Francis C. Lowell, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

Farahe Maloof, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

Gordon S. Myers, M.D., Assistant Clinical Professor of Medicine.

Joseph E. F. Riseman, M.D., Assistant Clinical Professor of Medicine.

Herbert A. Selenkow, M.D., Assistant Professor of Medicine at the Peter Bent Brigham Hospital.

Morton N. Swartz, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

James L. Tullis, M.D., Assistant Clinical Professor of Medicine.

Warren E. C. Wacker, M.D., Assistant Professor of Medicine.

Arthur L. Watkins, M.D., Assistant Clinical Professor of Medicine.

Roe E. Wells, M.D., Assistant Professor of Medicine.

D. Michael Young, M.D., Assistant Professor of Biological

Chemistry in the Department of Medicine at the Massachusetts General Hospital.

Kenneth T. Bird, M.D., Lecturer on Medicine.

Joseph F. Dingman, M.D., Lecturer on Medicine.

Joseph W. Gardella, M.D., Lecturer on Medicine, and Associate Dean of the Faculty of Medicine for Student Affairs.

Andrew G. Jessiman, M.B., Ch.B., Lecturer on Medicine (from September 1, 1966).

John H. Knowles, M.D., Lecturer on Medicine.

Lucile F. Adamson, Ph.D., Associate in Biological Chemistry in the Department of Medicine.

George E. Altman, M.D., Clinical Associate in Medicine.

Ronald A. Arky, M.D., Associate in Medicine.

Richard H. Aster, M.D., Associate in Medicine, and Tutor in Medical Science.

C. Cabell Bailey, M.D., Clinical Associate in Medicine.

William H. Baker, M.D., Clinical Associate in Medicine.

Guy O. Barnett, M.D., Associate in Medicine at the Massachusetts General Hospital.

Samuel B. Beaser, M.D., Clinical Associate in Medicine.

Daniel S. Bernstein, M.D., Associate in Medicine.

Kurt J. Bloch, M.D., Associate in Medicine at the Massachusetts General Hospital.

Richard A. Bloomfield, M.D., Clinical Associate in Medicine.

Nancy L. R. Bucher, M.D., Clinical Associate in Medicine.

Walter R. Burack, M.D., Clinical Associate in Medicine.

James R. Carter, Jr., M.D., Associate in Medicine at the Massachusetts General Hospital (from January 1, 1967).

Phin Cohen, M.D., Associate in Medicine (on leave August 15, 1966 through June 30, 1967).

Perry J. Culver, M.D., Clinical Associate in Medicine, and Associate Dean for Admissions of the Faculty of Medicine.

Frank F. Davidoff, M.D., Associate in Medicine at the Beth Israel Hospital.

A. Ivins C. De Friez, M.D., Clinical Associate in Medicine.

Roman W. DeSanctis, M.D., Clinical Associate in Medicine.

Daniel Deykin, M.D., Associate in Medicine, and Tutor in Medical Science.

Laurence E. Earley, M.D., Associate in Medicine.

David S. Feingold, M.D., Associate in Medicine at the Beth Israel Hospital.

Jerome W. Fischbein, M.D., Clinical Associate in Medicine.

Gerald S. Foster, M.D., Clinical Associate in Medicine.

Paul Fremont-Smith, M.D., Clinical Associate in Medicine.

Allan L. Friedlich, M.D., Clinical Associate in Medicine.

Ralph S. Goldsmith, M.D., Associate in Medicine.

Gareth M. Green, M.D., Associate in Medicine.

Warren R. Guild, M.D., Clinical Associate in Medicine.

Victor Gurewich, M.D., Clinical Associate in Medicine.

Dorothea E. W. Hellman, M.D., Clinical Associate in Medicine.

Emanuel S. Hellman, M.D., Clinical Associate in Medicine.

Edgar C. Henshaw, M.D., Associate in Medicine.

Bernard M. Jacobson, M.D., Clinical Associate in Medicine.

Jeremias H. R. Kagi, M.D., Associate in Medicine.

Rita M. Kelley, M.D., Clinical Associate in Medicine.

Bernard Klimian, M.D., Associate in Medicine at the Massachusetts General Hospital.

David P. Lauler, M.D., Associate in Medicine.

Leah M. Lowenstein, M.D., Ph.D., Associate in Medicine (on leave October 1, 1966 through June 30, 1967).

Donald B. Martin, M.D., Associate in Medicine at the Massachusetts General Hospital.

Dudley Merrill, M.D., Clinical Associate in Medicine.

John A. Mills, M.D., Associate in Medicine at the Massachusetts General Hospital.

John M. Moses, M.D., Associate in Medicine at the Massachusetts General Hospital.

H. Richard Nesson, M.D., Clinical Associate in Medicine.

Thomas F. O'Brien, M.D., Clinical Associate in Medicine.

Donald E. Oken, M.D., Associate in Medicine at the Peter Bent Brigham Hospital.

Lot B. Page, M.D., Associate in Medicine at the Massachusetts General Hospital (resigned September 30, 1966).

Liberto P. Pechet, M.D., Associate in Medicine (resigned August 31, 1966).

Maurice M. Pechet, Ph.D., M.D., Associate in Medicine at the Massachusetts General Hospital.

George M. Pike, M.D., Clinical Associate in Medicine.

Gerald R. Plotkin, M.D., Clinical Associate in Medicine, and Tutor in Medical Science.

Curtis Prout, M.D., Clinical Associate in Medicine.

Mitchell T. Rabkin, M.D., Associate in Medicine at the Beth Israel Hospital.

Kurt Randerath, M.D., Associate in Biological Chemistry in the Department of Medicine at The Massachusetts General Hospital.

Michael K. Rees, M.D., Associate in Biological Chemistry in the Department of Medicine at the Massachusetts General Hospital.

Dwight R. Robinson, M.D., Associate in Medicine at the Massachusetts General Hospital.

Stephen H. Robinson, M.D., Associate in Medicine.

Leon D. Sabath, M.D., Associate in Medicine.

Seymour M. Sabesin, M.D., Associate in Medicine at the Massachusetts General Hospital.

Guillermo C. Sanchez, M.D., Clinical Associate in Medicine.

Charles A. Sanders, M.D., Clinical Associate in Medicine.

Arthur A. Sasahara, M.D., Clinical Associate in Medicine.

Stuart F. Schlossman, M.D., Associate in Medicine at the Beth Israel Hospital.

Peter H. Schur, M.D., Associate in Medicine at the Robert B. Brigham Hospital (from January 1, 1967).

William J. Shriber, M.D., Clinical Associate in Medicine.

Philip J. Snodgrass, M.D., Associate in Medicine and Henry A. and Camillus Christian Fellow in Medicine.

Julian G. Snyder, Ph.D., M.D., Clinical Associate in Medicine.

William D. Sohier, Jr., M.D., Clinical Associate in Medicine (on leave July 1, 1966 through June 30, 1967).

Norman S. Stearns, M.D., Clinical Associate in Medicine.

Samuel Stearns, M.D., Clinical Associate in Medicine.

Philip Steinmetz, M.D., Associate in Medicine at the Beth Israel Hospital.

Mary L. Stephenson, Ph.D., Associate in Biological Chemistry in the Department of Medicine.

J. Sydney Stillman, Jr., M.D., Clinical Associate in Medicine.

John D. Stoeckle, M.D., Associate in Medicine at the Massachusetts General Hospital.

George P. Sturgis, M.D., Clinical Associate in Medicine.

Melvin I. Sturnick, M.D., Clinical Associate in Medicine.

David D. Ulmer, M.D., Associate in Medicine, and Tutor in Medicine.

Arnold N. Weinberg, M.D., Associate in Medicine at the Massachusetts General Hospital.

Edwin O. Wheeler, M.D., Clinical Associate in Medicine.

Conger Williams, M.D., Clinical Associate in Medicine.

Bertram M. Winer, M.D., Clinical Associate in Medicine.

Kenneth A. Woeber, M.B., Ch.B., Associate in Medicine.

Richard Wolff, M.D., Clinical Associate in Medicine.

Norman Zamcheck, M.D., Clinical Associate in Medicine.

Benjamin Alexander, M.D., Lecturer on Medicine (through January 31, 1967).

Paul H. Black, M.D., Lecturer on Medicine (from May 1, 1967 through June 30, 1967).

Thomas C. Chalmers, Jr., M.D., Lecturer on Medicine.

Carleton B. Chapman, M.D., Lecturer on Medicine.

John R. Graham, M.D., Lecturer on Medicine.

Seymour J. Gray, M.D., Ph.D., Lecturer on Medicine.

Harriet L. Hardy, M.D., Lecturer on Medicine.

Robin D. Marshall, Ph.D., Visiting Lecturer on Medicine (from September 1, 1966).

Carl V. Moore, M.D., Visiting Lecturer on Medicine (from February 1, 1967 through February 15, 1967).

Albert O. Seeler, M.D., Lecturer on Medicine.
Louis Shuster, Ph.D., Visiting Lecturer on Medicine.
Nathan Sidel, M.D., Lecturer on Medicine.
John B. Stanbury, M.D., Lecturer on Medicine.
Frederick Stohlman, Jr., M.D., Lecturer on Medicine.
Maurice B. Strauss, M.D., Lecturer on Medicine.
Philip A. Tumulty, M.D., Visiting Lecturer on Medicine (from February 26, 1967 through March 4, 1967).
Chester A. Alper, M.D., Research Associate in Medicine.
Saul Aronow, Ph.D., Research Associate in Medicine.
Marios C. Balodimos, M.D., Research Associate in Medicine.
Thomas U. L. Biber, M.D., Research Associate in Medicine (through September 15, 1966).
Adil E. Birbari, M.D., Research Associate in Medicine (resigned November 30, 1966).
Gordon L. Brownell, Ph.D., Research Associate in Medicine.
Joan I. Casey, M.D., Research Associate in Medicine.
Renata E. Cathou, Ph.D., Research Associate in Medicine.
Albert R. Christlieb, M.D., Research Associate in Medicine.
William R. Elliott, Ph.D., Research Associate in Medicine (from August 15, 1966).
Araceli M. Engel, Ph.D., Research Associate in Medicine (resigned January 31, 1967).
Barbara C. George, M.D., Research Associate in Medicine (from November 1, 1966).
Ray E. Gleason, Ph.D., Research Associate in Mathematical Biology in the Department of Medicine.
Audrey E. Haschemeyer, Ph.D., Research Associate in Medicine.
Florence W. Haynes, Ph.D., Research Associate in Medicine.
Hans A. Hochrein, M.D., Research Associate in Medicine (from October 1, 1966).
Mario A. Inchiosa, Jr., Ph.D., Research Associate in Medicine (resigned August 31, 1966).
Barbara W. Kalckar, Ph.D., Research Associate in Bacteriology and Immunology in the Department of Medicine (through December 31, 1966).

Yuet-Wai Kan, M.B., B.S., Research Associate in Medicine.
Shelby Kashket, Ph.D., Research Associate in Medicine.
Howard G. Knuttgen, Ph.D., Research Associate in Medicine.
Hans B. Nevinny-Stickel, M.D., Research Associate in Medicine.
David M. Nitzberg, Sc.D., Research Associate in Biostatistics in the Department of Medicine (resigned January 31, 1967).
Robert Ouellette, Ph.D., Research Associate in Medicine (resigned November 30, 1966).
Ali A. Pur-Shahriari, M.D., Research Associate in Medicine (from September 1, 1966).
Bernard J. Ransil, Ph.D., M.D., Research Associate in Medicine.
Calvin A. Saravis, Ph.D., Research Associate in Biological Chemistry in the Department of Medicine.
Stephen B. Shohet, M.D., Research Associate in Medicine.
Bunsiti Simizu, M.D., Research Associate in Medicine.
Mary J. Spiro, Ph.D., Research Associate in Medicine.
Kathleen Stratton, Ph.D., Research Associate in Medicine.
Herbert J. Sukenik, Ph.D., M.D., Research Associate in Medicine.
Marvin L. Tanzer, M.D., Research Associate in Medicine.
Endre M. Tarjan, Ph.D., Research Associate in Medicine (from August 15, 1966).
John A. Thomson, M.D., Research Associate in Medicine (from October 1, 1966).
Khin M. Tin, M.B., B.S., Research Associate in Medicine (from October 1, 1966).
Samuel Wilensky, Ph.D., Research Associate in Medicine (from August 1, 1966).
Munehiko Yukioka, M.D., Ph.D., Research Associate in Medicine
Leona R. Norman Zarsky, M.D., Research Associate in Medicine.
Americo Abbruzzese, M.D., Instructor in Medicine.
Irving P. Ackerman, M.D., Instructor in Medicine.
Felix Ades, M.B., Ch.B., Instructor in Medicine.
Sidney Alexander, M.D., Instructor in Medicine.
David H. Alpers, M.D., Instructor in Medicine.
George P. Baker, Jr., M.D., Instructor in Medicine.

Lawrence Baker, M.D., D.M.D., Instructor in Medicine.
Victor G. Balboni, M.D., Instructor in Medicine.
Edgar D. Bell, Jr., M.D., Instructor in Medicine.
Patricia H. Benedict, M.D., Instructor in Medicine.
Edwin D. Bransome, Jr., M.D., Instructor in Medicine (from November 1, 1966).
Lewis E. Braverman, M.D., Instructor in Medicine.
Caesar Briefer, Jr., M.D., Instructor in Medicine.
Robert E. Brownlee, M.D., Instructor in Medicine.
John B. Cadigan, Jr., M.D., Instructor in Medicine.
Edmund J. Callahan, 3rd, M.D., Instructor in Medicine.
Robert W. Carey, M.D., Instructor in Medicine.
Charles B. Carpenter, M.D., Instructor in Medicine.
Walter H. Caskey, M.D., Instructor in Medicine.
John W. Cass, Jr., Ph.D., M.D., Instructor in Medicine.
Melvin H. Chalfen, M.D., Instructor in Medicine.
Mortimer M. Civan, M.D., Instructor in Medicine.
Milton H. Clifford, M.D., Instructor in Medicine.
Cecil H. Coggins, M.D., Instructor in Medicine.
Mark H. Cooley, M.D., Instructor in Medicine.
Augustus T. Crocker, M.D., Instructor in Medicine.
Seth C. Crocker, M.D., Instructor in Medicine.
James F. Cummins, M.D., Instructor in Medicine.
William C. Elliott, M.D., Instructor in Medicine.
Joseph M. St. F. Flanagan, M.B., Ch.B., Instructor in Medicine.
William Franklin, M.D., Instructor in Medicine.
Robert E. Fuisz, M.D., Instructor in Medicine.
Robert K. Funkhouser, M.D., Instructor in Medicine.
Arthur J. Garceau, M.D., Instructor in Medicine.
H. Jack Geiger, M.D., Instructor in Medicine.
Richard J. Glassock, M.D., Instructor in Medicine.
Kenneth M. Graham, M.D., Instructor in Medicine.
Mortimer S. Greenberg, M.D., Instructor in Medicine.
Joseph S. Gryboski, M.D., Instructor in Medicine.
Edward B. Hager, M.D., Instructor in Medicine.
Arthur P. Hall, M.D., Instructor in Medicine.

Earle I. Hammer, M.D., Instructor in Medicine.
Constantine L. Hampers, M.D., Instructor in Medicine.
John W. Harthorne, M.D., Instructor in Medicine.
Samuel R. Himmelhoch, M.D., Instructor in Medicine.
Carl A. Hirsch, M.D., Instructor in Medicine.
Robert B. Holden, M.D., Instructor in Medicine.
Frank A. Howard, M.D., Instructor in Medicine.
James H. Jackson, M.D., Instructor in Medicine.
Harry S. Jacob, M.D., Instructor in Medicine.
Paul I. Jagger, M.D., Instructor in Medicine.
Alan L. Kaitz, M.D., Instructor in Medicine.
Paul A. Kantrowitz, M.D., Instructor in Medicine.
Jay H. Katz, M.D., Instructor in Medicine.
Sheldon D. Kaufman, M.D., Instructor in Medicine.
Homayoun Kazemi, M.D., Instructor in Medicine.
Melvin I. Klayman, M.D., Instructor in Medicine.
Allan Kliman, M.D., Instructor in Medicine.
Hugh H. Kopald, M.D., Instructor in Medicine, and Tutor in Medical Science.
Julius Kritzman, M.D., Instructor in Medicine.
Ting-Kai Li, M.D., Instructor in Medicine.
Arthur J. Lockhart, M.D., Instructor in Medicine.
Jason E. Lucas, D.M.D., M.D., Instructor in Medicine.
George W. Lynch, M.D., Instructor in Medicine.
Joseph E. Mackie, M.D., Instructor in Medicine.
James S. Mansfield, M.D., Instructor in Medicine.
Edwin P. Maynard, 3rd, M.D., Instructor in Medicine.
L. Tillman McDaniel, M.D., Instructor in Medicine.
William F. McNeely, M.D., Instructor in Medicine.
Avard M. Mitchell, Ph.D., M.D., Instructor in Medicine.
Eugene Morkin, Jr., M.D., Instructor in Medicine.
Robert S. Morrison, M.D., Instructor in Medicine.
John H. Moxley, 3d, M.D., Instructor in Medicine, and Assistant to the Dean of the Faculty of Medicine.
Hyman L. Naterman, M.D., Instructor in Medicine.
Larry Nathanson, M.D., Instructor in Medicine.

Avrum M. Novitch, M.D., Instructor in Medicine.
Carey M. Peters, M.D., Instructor in Medicine.
Arthur S. Pier, Jr., M.D., Instructor in Medicine.
Robert S. Pinals, M.D., Instructor in Medicine.
Joseph Pines, M.D., Instructor in Medicine.
Anthony J. Piro, M.D., Instructor in Medicine.
Walter W. Point, 3d, M.D., Instructor in Medicine.
Searle B. Rees, M.D., Instructor in Medicine.
Edward S. Rendall, M.D., Instructor in Medicine.
Robert H. Resnick, M.D., Instructor in Medicine.
Frank F. Richards, M.D., Instructor in Medicine.
William A. Richards, M.D., Instructor in Medicine.
Irwin H. Rosenberg, M.D., Instructor in Medicine.
Dorothy Rubinstein, M.D., Instructor in Medicine.
Thomas J. Ryan, M.D., Instructor in Medicine.
Elliot L. Sagall, M.D., Instructor in Medicine.
Walter T. St. Goar, M.D., Instructor in Medicine.
Allan I. Sandler, M.D., Instructor in Medicine.
Gordon A. Saunders, M.D., Instructor in Medicine.
Lawrence Saxon, M.D., Instructor in Medicine.
Robert H. Schapiro, M.D., Instructor in Medicine.
Peter B. Schneider, M.D., Instructor in Medicine.
John Schulman, Jr., M.D., Instructor in Medicine.
Norman J. Selverstone, M.D., Instructor in Medicine.
Hope H. Snider, M.D., Instructor in Medicine (from October 15, 1966).
Edward L. Socolow, M.D., Instructor in Medicine.
John S. Soeldner, M.D., Instructor in Medicine.
Harold J. Stein, M.D., Instructor in Medicine.
Samuel W. Stein, M.D., Instructor in Medicine.
Jurgen Steinke, M.D., Instructor in Medicine.
Lawrence I. Stellar, M.D., Instructor in Medicine.
Richard R. Streiff, M.D., Instructor in Medicine.
Robert H. Talkov, M.D., Instructor in Medicine.
Samuel O. Thier, M.D., Instructor in Medicine.

Jeremiah G. Tilles, M.D., Instructor in Medicine (from October 1, 1966).
Charles Trey, M.B., Ch.B., Instructor in Medicine.
Donald A. Tucker, M.D., Instructor in Medicine.
Robert B. Ullian, M.D., Instructor in Medicine.
John C. Wells, Jr., M.D., Instructor in Medicine.
Peter M. Yurchak, M.D., Instructor in Medicine.
Jon Abrams, M.D., Assistant in Medicine.
Homayoun Amir-Ahmadi, M.B., B.S., Assistant in Medicine.
Julian M. Arofsty, M.D., Assistant in Medicine.
Jose Bejar, M.D., Assistant in Medicine (through August 31, 1966).
William H. Birchard, M.D., Assistant in Medicine.
Peter Braun, M.D., Assistant in Medicine.
Anthony F. H. Britten, M.B., Ch.B., Assistant in Medicine.
Joel E. Cannilla, M.D., Assistant in Medicine.
Robert J. Carey, M.D., Assistant in Medicine.
Allan J. Criss, M.D., Assistant in Medicine.
Robert G. Dluhy, M.D., Assistant in Medicine.
Francis J. Donovan, M.D., Assistant in Medicine.
Morris Dratch, M.D., Assistant in Medicine (from September 1, 1966).
Kenneth Fremont-Smith, M.D., Assistant in Medicine.
Joel C. Goldthwait, M.D., Assistant in Medicine.
Jacob Gottler, M.D., Assistant in Medicine (from September 1, 1966).
Michael A. Gravallese, Jr., M.D., Assistant in Medicine.
Thomas Harcus, M.B., Ch.B., Assistant in Medicine.
Ernest A. Higgins, Jr., M.D., Assistant in Medicine.
Russell L. Jeffery, M.D., Assistant in Medicine.
Andrew Ho Kang, M.D., Assistant in Medicine.
Parnag H. Kasarjian, M.D., Assistant in Medicine (from September 1, 1966).
Lawrence H. Kedes, M.D., Assistant in Medicine.
Charles S. Keevil, Jr., M.D., Assistant in Medicine.
Christian L. Khung, M.D., Assistant in Medicine.

Lawrence M. Klainer, M.D., Assistant in Medicine (from January 1, 1967).
George P. Kozak, M.D., Assistant in Medicine.
Oliver S. Leland, Jr., M.D., Assistant in Medicine.
David C. Lewis, M.D., Assistant in Medicine.
Francois Martin, M.D., Assistant in Medicine.
June C. May, M.D., Assistant in Medicine.
Donald McCaughan, M.D., Assistant in Medicine.
Richard S. McCray, M.D., Assistant in Medicine.
James J. Mertz, M.D., Assistant in Medicine.
Lawrence M. Miller, M.D., Assistant in Medicine.
Edward W. Moore, M.D., Assistant in Medicine.
Robert L. Morse, M.D., Assistant in Medicine.
John R. Niceforo, M.D., Assistant in Medicine.
Robert K. Osborne, M.D., Assistant in Medicine.
David Paine, M.D., Assistant in Medicine.
Burton J. Polansky, M.D., Assistant in Medicine.
Sholem Postel, M.D., Assistant in Medicine.
Richmond Prescott, M.D., Assistant in Medicine.
Jules R. Schwaber, M.D., Assistant in Medicine.
Ben Selling, M.D., Assistant in Medicine (from September 1, 1966).
David L. Singer, M.D., Assistant in Medicine.
John H. Sisson, M.D., Assistant in Medicine.
Burton E. Sobel, M.D., Assistant in Medicine.
Oscar E. Starobin, M.D., Assistant in Medicine.
Robert C. Stewart, M.D., Assistant in Medicine.
Denise J. Strieder, M.D., Assistant in Medicine.
William E. Strole, Jr., M.D., Assistant in Medicine.
Jay M. Sullivan, M.D., Assistant in Medicine.
Richard H. Thurm, M.D., Assistant in Medicine.
Charles H. Weingarten, M.D., Assistant in Medicine (from October 1, 1966).
John H. Williams, Jr., M.D., Assistant in Medicine.
Martin J. Wohl, M.D., Assistant in Medicine.

Marvin S. Wool, M.D., Assistant in Medicine (resigned September 30, 1966).

Eugene A. Abramson, M.D., Research Fellow in Medicine.

Kurt G. M. Alberti, M.D., Research Fellow in Medicine (from September 1, 1966).

Douglas V. Almond, M.D., Research Fellow in Medicine (from August 1, 1966).

Morton E. Alpert, M.D., Research Fellow in Medicine.

Robert M. Amick, M.D., Research Fellow in Medicine.

Ezra A. Amsterdam, M.D., Research Fellow in Medicine.

Raj Kumar Anand, M.D., Research Fellow in Medicine.

Toshio Aoyagi, M.D., Research Fellow in Medicine (through August 31, 1966).

Alan B. Ashare, M.D., Research Fellow in Medicine.

Charles H. Asplen, M.D., Research Fellow in Medicine.

Komanduri M. Ayyangar, Ph.D., Research Fellow in Medicine (from September 1, 1966).

George L. Bailey, M.D., Research Fellow in Medicine.

Frederick F. Barrett, M.D., Research Fellow in Medicine.

Pierre F. Becker, M.D., Research Fellow in Medicine.

Louis Belleau, M.D., Research Fellow in Medicine.

Herbert Benson, M.D., Research Fellow in Medicine.

Prem Bhardwaj, M.D., Research Fellow in Medicine (from August 1, 1966).

Stuart F. Blum, M.D., Research Fellow in Medicine.

Guenther Boden, M.D., Research Fellow in Medicine.

William E. Braun, M.D., Research Fellow in Medicine.

Romaine R. Bruns, Ph.D., Research Fellow in Medicine.

Matthew A. Budd, M.D., Research Fellow in Medicine.

David M. Bull, M.D., Research Fellow in Medicine.

Howard F. Bunn, M.D., Research Fellow in Medicine (through July 31, 1966).

Hans R. Burgi, M.D., Research Fellow in Medicine.

Paul H. Burr, B.S., Research Fellow in Medicine.

Marc S. Bygdeman, M.D., Ph.D., Research Fellow in Medicine.

Louis R. Caplan, M.D., Research Fellow in Medicine.

John M. Carroll, M.D., Research Fellow in Medicine.

Regelio E. Catalan, Ph.D., Research Fellow in Medicine (from October 1, 1966).

Narinder P. S. Chawla, M.B., Ch.B., Research Fellow in Medicine.

Philip N. Cheifetz, M.D., C.M., Research Fellow in Medicine

Charles M. Clark, Jr., M.D., Research Fellow in Medicine.

Judith A. Clayton, Ph.D., Research Fellow in Medicine (from January 1, 1967).

Laurence P. Cloud, M.D., Research Fellow in Medicine.

Linda B. Cohen, Ph.D., Research Fellow in Medicine (from September 1, 1966).

Stephen N. Cohen, M.D., Research Fellow in Medicine.

Richard A. Cooper, M.D., Research Fellow in Medicine.

Robert J. Craig, M.B., B.S., Research Fellow in Medicine.

Stephen J. Curtis, M.D., Research Fellow in Medicine.

James E. Dalen, M.D., Research Fellow in Medicine.

Dharam V. Datta, M.D., Research Fellow in Medicine (resigned December 31, 1966).

Daisy S. De Peralta, M.D., Research Fellow in Medicine.

Donald R. Di Bona, Ph.D., Research Fellow in Medicine.

Richard S. Dillon, M.D., Research Fellow in Medicine.

Michael Doyle, M.D., Research Fellow in Medicine.

Marc H. Dresden, Ph.D., Research Fellow in Medicine (from August 1, 1966).

Patricia A. Drewes, Ph.D, Research Fellow in Medicine.

Richard J. Duma, M.D., Research Fellow in Medicine.

Dickson B. Dunlap, M.D., Research Fellow in Medicine.

Leslie M. Eber, M.D., Research Fellow in Medicine.

Marvin Edelman, Ph.D., Research Fellow in Medicine (from September 1, 1966).

Murray Epstein, M.D., Research Fellow in Medicine (resigned July 15, 1966).

Eric A. Espiner, M.D., Research Fellow in Medicine.

Gerald L. Evans, M.D., Research Fellow in Medicine.

John M. Evanson, M.B., Ch.B., Research Fellow in Medicine (from October 1, 1966).

Ernest L. Fallen, M.D., Research Fellow in Medicine.

Khaja Fareeduddin, M.B., B.S., Research Fellow in Medicine.

Allison B. Felarca, M.D., Research Fellow in Medicine.

Michael Field, M.D., Research Fellow in Medicine.

Gordon G. Forstner, M.D., Research Fellow in Medicine (resigned July 15, 1966).

Theodore I. Francis, M.B., B.S., Research Fellow in Medicine (from November 1, 1966).

George L.A. From, M.D., Research Fellow in Medicine (from January 1, 1967).

Norma Gaffud, M.D., Research Fellow in Medicine.

Pierce Gardner, M.D., Research Fellow in Medicine.

Jack M. George, M.D., Research Fellow in Medicine (through August 19, 1966).

Edmund H. Geschickter, M.D., Research Fellow in Medicine.

Robert M. Glickman, M.D., Research Fellow in Medicine.

John N. Goldman, M.D., Research Fellow in Medicine.

Marise S. Gottlieb, M.D., Research Fellow in Medicine.

Friedrich A. Gries, M.D., Research Fellow in Medicine (resigned September 24, 1966).

Jerome H. Grossman, M.D., Research Fellow in Medicine.

Ronald D. Guttmann, M.D., Research Fellow in Medicine.

John A. Haines, Ph.D., Research Fellow in Medicine (resigned December 14, 1966).

William G. M. Hardison, M.D., Research Fellow in Medicine.

Edward D. Harris, Jr., M.D., Research Fellow in Medicine (resigned December 31, 1966).

Robert A. Heinle, M.D., Research Fellow in Medicine.

John W. B. Hershey, Ph.D. Research Fellow in Medicine.

John P. Herzog, M.D., Research Fellow in Medicine.

Norman K. Hollenberg, M.D., Ph.D., Research Fellow in Medicine.

Frederic G. Hoppin, Jr., M.D., Research Fellow in Medicine.

Stephen B. Hulley, M.D., Research Fellow in Medicine.

Newton E. Hyslop, Jr., M.D., Research Fellow in Medicine.
Takehiko Ide, M.D., Research Fellow in Medicine.
Claude M. Janeway, Ph.D., Research Fellow in Medicine.
Janakiraman Jayaraman, Ph.D., Research Fellow in Medicine.
John J. Jeffrey, Jr., Ph.D., Research Fellow in Medicine.
Hugh H. Johnston, Jr., M.D., Research Fellow in Medicine.
Charles B. Kahn, M.D., Research Fellow in Medicine.
Donald E. Kamm, M.D., Research Fellow in Medicine (through August 31, 1966).
Alan S. Keitt, M.D., Research Fellow in Medicine (through July 31, 1966).
Harvey G. Kemp, Jr., M.D., Research Fellow in Medicine.
Madeline A. Kirchberger, Ph.D., Research Fellow in Medicine (from September 1, 1966).
Ulrich R. Kleeberg, M.D., Research Fellow in Medicine.
Russell C. Klein, M.D., Research Fellow in Medicine.
Raymond S. Koff, M.D., Research Fellow in Medicine.
Raj Kumar, M.B., B.S., Research Fellow in Medicine.
Paul J. Laraia, M.D., Research Fellow in Medicine.
Priscilla N. Ligot, M.D., Research Fellow in Medicine.
David M. Linekin, Ph.D., Research Fellow in Medicine.
Albert F. LoBuglio, M.D., Research Fellow in Medicine.
Manuel Lopez, M.D., Research Fellow in Medicine (from October 1, 1966).
Wilhelm F. Lubbe, M.D., Research Fellow in Medicine.
Ram Khelmiwan Mahabir, M.D., Research Fellow in Medicine.
Denis G. Martin, M.B., Ch.B. Research Fellow in Medicine.
Joseph Anthony Martino, M.D., Research Fellow in Medicine.
Charles E. McCall, M.D., Research Fellow in Medicine.
Franklin D. McDonald, M.D., Research Fellow in Medicine.
Keith M. McDonald, M.D., Research Fellow in Medicine.
Read F. McGehee, Jr., M.D., Research Fellow in Medicine.
Michael W. McGill, M.D., Research Fellow in Medicine.
Neil McIntyre, M.B., B.S., Research Fellow in Medicine (from October 1, 1966).

James P. A. McManus, M.B., Ch.B., Research Fellow in Medicine (from October 1, 1966).

Antone A. Medeiros, M.D., Research Fellow in Medicine.

Gerald Medoff, M.D., Research Fellow in Medicine.

Judith Medoff, Ph.D., Research Fellow in Medicine (from September 1, 1966).

Orlando L. Meyers, M.B., Ch.B., Research Fellow in Medicine (from April 1, 1967).

George Miller, M.D., Research Fellow in Medicine.

Predrag Milosevic, M.D., Research Fellow in Medicine (from September 1, 1966).

Koji Mitsugi, Ph.D., Research Fellow in Medicine (resigned August 31, 1966).

Frederick L. Moolten, M.D., Research Fellow in Medicine.

Rejean Morais, Ph.D., Research Fellow in Medicine.

Alberto Munoz, M.D., Research Fellow in Medicine (through December 31, 1966).

Scott Murphy, M.D., Research Fellow in Medicine.

Allen R. Myers, M.D., Research Fellow in Medicine.

Robert M. Neer, M.D., Research Fellow in Medicine.

Sarah Nevo, M.D., Research Fellow in Medicine (through September 30, 1966).

Claude T. Nuzum, M.D., Research Fellow in Medicine.

Robert K. Ockner, M.D., Research Fellow in Medicine.

Kanami Odake, M.D., Research Fellow in Medicine (resigned October 31, 1966).

Hiroshi Ohta, M.D., Research Fellow in Medicine.

Robert P. Orange, M.D., Research Fellow in Medicine.

Oliver F. Owen, M.D., Research Fellow in Medicine.

Willy N. Pachas, M.D., Research Fellow in Medicine.

George L. Pauk, M.D., Research Fellow in Medicine.

Jack H. Pincus, Ph.D., Research Fellow in Medicine (from October 1, 1966).

Albert L. Politoff, M.D., Research Fellow in Medicine (resigned July 31, 1966).

Richard P. Propp, M.D., Research Fellow in Medicine.

Andre L. Purnode, M.D., Research Fellow in Medicine (from August 1, 1966).

Luka Rabadjija, M.D., Research Fellow in Medicine.

Alberto Ramirez, M.D., Research Fellow in Medicine.

Alan H. Rapoport, M.D., Research Fellow in Medicine.

Eugenio Rasio, M.D., Research Fellow in Medicine (through November 15, 1699).

Alla R. Reddy, Ph.D., Research Fellow in Medicine.

Samuel Refetoff, M.D., C.M., Research Fellow in Medicine.

Gary L. Robertson, M.D., Research Fellow in Medicine.

John B. Rodgers, Jr., M.D., Research Fellow in Medicine (through August 31, 1966).

Fernando G. Rojas, M.D., Research Fellow in Medicine (resigned August 31, 1966).

Lenor Rojas-Benavides, M.D., Research Fellow in Medicine.

Barbara J. Rosen, M.D., Research Fellow in Medicine.

Juerg-Peter Rosenbusch, M.D., Research Fellow in Medicine (resigned September 15, 1966).

Shaun J. Ruddy, M.D., Research Fellow in Medicine.

Neil B. Ruderman, M.D., Research Fellow in Medicine.

Martin Sarner, M.B., Research Fellow in Medicine (from September 1, 1966).

Badri N. Saxena, M.D., Research Fellow in Medicine.

Klaus F. R. Schiller, M.B., Ch.B., Research Fellow in Medicine (resigned November 22, 1966).

Howard J. Schwartz, M.D., Research Fellow in Medicine.

Larry G. Seidl, M.D., Research Fellow in Medicine.

James C. Shelburne, M.D., Research Fellow in Medicine.

Cynthia K. Silbert, M.D., Research Fellow in Medicine.

Richard J. Sobel, M.D., Research Fellow in Medicine.

Theodore E. Spielberg, M.D., Research Fellow in Medicine.

Daniel J. Stechschulte, M.D., Research Fellow in Medicine (resigned August 31, 1966).

Neal H. Steigbigel, M.D., Research Fellow in Medicine.

Gary F. Stein, M.D., Research Fellow in Medicine.

James D. Steinberg, M.D., Research Fellow in Medicine.

James M. Streeto, M.D., Research Fellow in Medicine.
Yolando Q. M. Sulit, M.D., Research Fellow in Medicine.
Richard C. Talamo, M.D., Research Fellow in Medicine.
Kay Tanaka, M.D., Research Fellow in Medicine.
Gilbert T. Thiel, M.D., Research Fellow in Medicine.
Gilbert R. Thompson, M.B., B.S., Research Fellow in Medicine (from September 1, 1966).
James R. Tillotson, M.D., Research Fellow in Medicine.
John S. Tryphonopoulos, M.D., Research Fellow in Medicine.
Joseph R. Tucci, M.D., Research Fellow in Medicine.
Yong Uahwatanasakul, M.D., Research Fellow in Medicine.
Martin D. Valentine, M.D., Research Fellow in Medicine.
Francis A. Waldvogel, M.D., Research Fellow in Medicine (from October 1, 1966).
Ian L. Weatherall, Ph.D., Research Fellow in Medicine.
Dale A. Webster, Ph.D., Research Fellow in Medicine.
Richard L. Weinstein, M.D., Research Fellow in Medicine (from September 1, 1966).
Robert F. Williams, M.D., Research Fellow in Medicine.
Steven Wolfson, M.D., Research Fellow in Medicine.
Mohammed Akbarian, M.D., Teaching Fellow in Medicine.
Joseph A. Chazan, M.D., Teaching Fellow in Medicine.
Albert R. Deep, M.D., Teaching Fellow in Medicine.
Richard C. Gardner, M.D., Teaching Fellow in Medicine.
Stephen E. Goldfinger, M.D., Teaching Fellow in Medicine.
John A. Kastor, M.D., Teaching Fellow in Medicine.
Robert C. Leinbach, M.D., Teaching Fellow in Medicine.
Robert H. McCollough, M.D., Teaching Fellow in Medicine.
James C. McFarland, M.D., Teaching Fellow in Medicine.
Albert S. Most, M.D., Teaching Fellow in Medicine.
Wong C. Ping, M.D., Teaching Fellow in Medicine (through September 30, 1966).
Joel P. Schrank, M.D., Teaching Fellow in Medicine.
Charles L. Schulman, M.D., Teaching Fellow in Medicine.
Paul S. Schwartz, M.D., Teaching Fellow in Medicine.
Kenneth I. Shine, M.D., Teaching Fellow in Medicine.

Charles B. Smith, M.D., Teaching Fellow in Medicine.
William B. Stason, M.D., Teaching Fellow in Medicine.
Henry W. Vaillant, M.D., Teaching Fellow in Medicine.
Michel B. Vallotton, M.D., Teaching Fellow in Medicine.
Egils Ververbrants, M.D., Teaching Fellow in Medicine.
Michael D. Waterfield, Ph.D., Teaching Fellow in Medicine (from January 1, 1967).
Dana E. Wilson, M.D., Teaching Fellow in Medicine.
Richard P. Zimon, M.D., Teaching Fellow in Medicine.

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Affiliated:

Neil L. Crone, M.D., Professor of Business Administration, and Director of the Business School Health Service.
Dana L. Farnsworth, M.D., Henry K. Oliver Professor of Hygiene, and Director of University Health Services.
Herman M. Kalckar, M.D., Ph.D., Professor of Biological Chemistry at the Massachusetts General Hospital.
Lewis L. Engel, Ph.D., Professor of Biological Chemistry, and Permanent Faculty Fellow of the American Cancer Society.
Henry M. Fox, M.D., Associate Clinical Professor of Psychiatry.
Roger W. Jeanloz, D.Sc., Associate Professor of Biological Chemistry at the Massachusetts General Hospital.
Edward H. Kass, Ph.D., M.D., Associate Professor of Bacteriology and Immunology.
Edgar B. Taft, M.D., Associate Clinical Professor of Pathology.
Stanley J. Adelstein, M.D., Philip H. Cook Fellow in Radiology, and Assistant Professor of Anatomy.
Sidney Leskowitz, Ph.D., Assistant Professor of Bacteriology and Immunology at the Massachusetts General Hospital.
Sidney V. Rieder, Ph.D., Assistant Professor of Biological Chemistry at the Massachusetts General Hospital.
Benedict F. Massell, M.D., Lecturer on Pediatrics.
Jerome O. Klein, M.D., Associate in Pediatrics.
William J. Reddy, D.Sc., Associate in Biological Chemistry at the Peter Bent Brigham Hospital.

Annette M. C. Rapin, Ph.D., Research Associate in Biological Chemistry.

## *Required Courses*

The time given to the Department of Medicine begins for the entire class in the second half of the second year and continues thereafter so that each student spends about one third to one quarter of his third and fourth years in the study of medicine. Additional time is provided for instruction in the Departments of Dermatology, Neurology, and Psychiatry. The techniques of instruction by the Department of Medicine include lectures, amphitheatre clinics, laboratory exercises and practical work in outpatient departments and wards. The major teaching is done in the outpatient departments and wards with one to four students per instructor so that (personalized) individual teaching is emphasized. Throughout, an effort is made to correlate the clinical aspects of patients with the pathophysiologic disturbances which have resulted in the patient's illness and to establish in the student's mind the importance of care and precision in diagnostic and therapeutic methods as best applied to fellow human beings in our complex society.

Medicine. *Second Year.* — During the second half of the second year, the Department of Medicine in cooperation with the Departments of Pathology, Pharmacology, Surgery and others participates in the teaching of pathologic physiology. This course provides an integrated approach to understanding the basic principles of disease and includes intensive instruction in laboratory methods. Accompanying the instruction in pathologic physiology, a course is given in the study of the patient by history taking and physical examination. For this instruction, the students are divided into groups of four and assigned to the four general hospitals.

Medicine. *Introduction to the Clinic.* — Beginning in the academic year 1964–1965 the third year was replaced by a twelve week course entitled Introduction to the Clinic. This is planned as an intensive training period to provide the student with the essential information, from the patient and from the laboratory, necessary for evaluation, diagnosis and management of the patient's problems. The class is divided among the four major teaching hospitals and the students

spend the entire twelve week period at one institution. The teaching time during this twelve week period is equally divided between Medicine (including Dermatology, Neurology, Pediatrics, and Psychiatry) and Surgery (including Neurosurgery, Obstetrics and Gynecology, Orthopedics, and Urology). The teaching in Medicine is done almost entirely on the wards and in the outpatient clinics, with students assigned individual patients and their physical examinations and history taking supervised by instructors. In addition to the emphasis on obtaining information from the patients, the students, in small groups of two or three, have weekly conferences with their instructors to discuss pathophysiologic and psychopathologic mechanisms pertaining to their patients. Weekly clinics are conducted by the senior medical staff at each hospital for the students assigned to that hospital.

MEDICINE. *Principal Clinical Year.* — Following the Introduction to the Clinic the students enter the Principal Clinical Year, during which they receive three months of Medicine in one of the four major teaching hospitals. During this period they serve as clinical clerks, functioning together with the intern and resident staff on the wards and in the clinics, and sharing responsibility in the study and treatment of patients under careful supervision. Daily rounds are made with a senior staff physician and patients are presented and thoroughly discussed.

MEDICINE. *Fourth Year Elective Period.* — The last five months, which follow the Principal Clinical Year, have been set aside to allow the student to take courses of his own choosing. The Department of Medicine offers a wide range of elective courses. The courses are of variable duration, from one to five months. Many one month courses are designed to afford the opportunity for students, individually or in small groups, to work in a specialty area of Medicine so as to broaden and deepen their clinical training. Some courses are offered in collaboration with other departments. Opportunities are provided for research within the Department of Medicine and the student who wishes to devote the total period to research may arrange to do so.

## *Facilities for Instruction*

The instruction is given at the Medical School, the Beth Israel Hospital, the Boston City Hospital, the Massachusetts General Hospital and the Peter Bent Brigham Hospital, as well as in several other

hospitals devoted to special purposes. In these hospitals abundant and varied clinical material is available for the conduct of numerous exercises.

SECOND YEAR HOURS

Pathologic physiology, including lectures and laboratory exercises. Dr. Freiman (Department of Pathology), Chairman, and Drs. Abelmann, Ingbar, Isselbacher, Jandl, Kazemi, Krane, and other members of the Department of Medicine together with members of the Departments of Pathology, Pharmacology, Surgery, Obstetrics and Gynecology, Pediatrics, Neurology, Psychiatry, and Radiology. 538

Introductory medicine consists largely of instruction in the examination of the patient. Clinical experience is gained by students in groups of four assigned to each instructor for three hours on two mornings a week during the second semester. Dr. Chapman (Chairman) and coordinators at the participating hospitals: Dr. Rosoff at the B.I.H.; Dr. Kass at the B.C.H.; Dr. W. H. Baker at the M.G.H.; and Dr. Lauler at the P.B.B.H.

Together, these two courses occupy eight half-days per week during the second semester.

INTRODUCTION TO THE CLINIC

Lectures and clinics on selected topics in internal medicine. Drs. Finland, Hiatt, Leaf, Thorn, and Associates.

Exercises in sections are held in the wards and outpatient departments at the general hospitals connected with the Medical School. The coordinator of this instruction is Dr. Leaf. Directly in charge at the B.I.H., Drs. A. S. Freedberg and Plotkin; at the B.C.H., Drs. Davidson and Abelmann; at the M.G.H., Dr. Foster; and at the P.B.B.H., Dr. Merrill. Students are divided into groups of two or three per instructor and devote one-half of the twelve weeks of Introduction to the Clinic to Medicine.

PRINCIPAL CLINICAL YEAR

Clinical clerkships, three months, at B.I.H. (Drs. Hiatt, Nesson and Associates); B.C.H. (Drs. Finland, Davidson, and Asso-

ciates); M.G.H. (Dr. Leaf and Associates); P.B.B.H. (Drs. Thorn, Ulmer and Associates).

## *Fourth Year Elective Courses**

BLOCK COURSES

501M. Infectious Diseases. Dr. Feingold.
502M. Hematology I. Drs. Alexander, Pechet, Bennett, Robinson, and Schlossman.
503M Gastroenterology I. Drs. L. Zetzel, Plotkin, Banks, Klayman, Fischbein, and Resnick.
505M. Vascular Diseases I. Dr. Deykin.
506M. Cardiology. Drs. A. S. Freedberg, Kurland, Linenthal, Zoll, and R. Wolff.
508M. Endocrinology and Metabolism. Drs. Goldberg and D. Hellman.
509M. Renal and Electrolyte Disorders. Drs. H. Frazier and Nesson.
510M. Cardiology I. Drs. Abelmann, Ellis, and Associates.
511M. Diabetes and Metabolism I. Drs. Hurwitz, Arky, and Associates.
512M. Endocrinology I. Dr. Ingbar and Associates.
513M. Hematology I. Drs. Jandl, Castle, and Associates.
514M. Clinical Liver Disease and Gastroenterology. Drs. Davidson, Zamcheck, and Associates. (*Same course as Pathology 512M.*)
515M. Disturbances of Nutrition in Clinical Medicine. Dr. Davidson and Associates.
516M. Kidney Disease and Electrolyte Metabolism. Dr. Earley and Associates.
517M. Cardiovascular Diseases I. Drs. Haber, Page, W. G. Austen, and Associates.
518M. Diabetes I. Dr. Field and Associates.
519M. Gastrointestinal Diseases I. Dr. Isselbacher and Associates.
520M. Hematology. Dr. Beck and Associates.
521M. Pulmonary Diseases I. Dr. Kazemi and Associates.
522M. Renal Diseases I. Dr. Leaf and Associates.
523M. Thyroid Disease I. Dr. Stanbury and Associates.
524M. Arthritis I. Dr. Krane and Associates.
525M. Endocrinology I. Dr. Federman and Associates.
526M. General Endocrinology. Dr. Federman and Associates.
527M. Infectious Disease I. Dr. Swartz and Associates.
528M. Cardiology and Cardiovascular Regulation. Drs. Gorlin, Hickler, Lauler and Elliott.
530M. Endocrinology — Metabolism. Drs. Cahill, Soeldner, and Steinke.
531M. Endocrinology — Metabolism. Dr. Marble.
532M. Endocrinology — Metabolism. Dr. Dingman.
533M. Endocrinology — Metabolism. Drs. Lauler and Thorn.
534M. Endocrinology — Metabolism. Dr. Selenkow.

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

535M. Gastroenterology. Dr. Snodgrass and Associates.
537M. Microbiology. Dr. O'Brien.
538M. Renal and Cardiorenal. Dr. Merrill.
539M. Comprehensive Medical Care I. Drs. Farnsworth, Prout, Crone, Postel, and Associates of the Health Services of Harvard University.
540M. Dermatology I. Dr. I. Freedberg. (*Same course as Dermatology 501M.*)
541M. Functional Anatomy, Biomechanics, and Reconstructive Surgery. Drs. Kermond and Pierce. (*Same course as Orthopedic Surgery 504M.*)
542M. Advanced Internal Medicine. Dr. Finland and Associates.
543M. Advanced Medicine. Drs. Warthin, Littmann, Sasahara, and Associates.
544M. Cardiology, Electrocardiography. Dr. Littmann and Associates.
545M. Infectious Diseases. Drs. Kass, Finland, and Associates.
547M. Clinical Clerkship on the Private Service of the M.G.H. Dr. A. Kranes.
548M. Clinical Gastrointestinal Disease. Drs. Culver, Ellis, and Point.
549M. Clinical Cardiology. Dr. Dexter.
550M. Clinical Cardiology. Dr. Gorlin.
551M. Advanced Internal Medicine. Dr. Hurwitz and Associates.
552M. General Medicine. Drs. Nichols, E. S. Hellman and Associates.

BLOCK COURSES — RESEARCH

801. Research in Neoplastic Diseases. Drs. Hiatt, Henshaw, and Hirsch.
802. Hematology II. Drs. Alexander, Pechet, Bennett, Robinson, and Schlossman.
803. Gastroenterology II. Dr. Plotkin.
805. Vascular Diseases II. Dr. Deykin.
806. Cardiac Research. Biochemistry of Cardiac Muscle Proteins. Dr. Inchiosa.
807. Cardiac Research. Experimental Hemodynamics in Altered Metabolic States. Drs. Kurland and A. S. Freedberg.
808. Cardiac Research. Cardiac Rhythmicity. Drs. Zoll and Linenthal.
809. Research in Endocrinology. Dr. Goldberg.
810. Research in Renal and Electrolyte Disorders. Dr. Frazier.
811. Bacteriology and Immunology. Dr. Kass and Associates.
812. Cardiology II. Dr. Abelmann and Associates.
814. Endocrinology II. Dr. Ingbar and Associates.
815. Hematology II. Drs. Jandl, Castle, and Associates.
816. Pathophysiology of Liver and Gastrointestinal Diseases. Drs. Davidson, McDermott, Zamcheck, and Associates. (*Same course as Pathology 806 and Surgery 815.*)
817. Nutritional Disease. Dr. Davidson and Associates.
818. Renal Diseases and Electrolytes. Dr. Earley and Associates.
819. Cardiovascular Diseases II. Drs. Haber, Page, W. G. Austen, and Associates.

820. Diabetes II. Dr. Field and Associates.
821. Gastrointestinal Diseases II. Dr. Isselbacher and Associates.
822. Hypertension. Dr. Page and Associates.
823. Pulmonary Diseases II. Dr. Kazemi and Associates.
824. Renal Diseases II. Dr. Leaf and Associates.
825. Thyroid Disease II. Dr. Stanbury and Associates.
826. Arthritis II. Dr. Krane and Associates.
827. Endocrinology II. Dr. Federman and Associates.
828. Infectious Disease II. Dr. Swartz and Associates.
829. Immunochemistry. Dr. Harter.
830. Hypertension. Dr. Hickler.
831. Endocrinology — Metabolism. Drs. Cahill, Soeldner, and Steinke.
832. Endocrinology — Metabolism. Dr. Dingman.
833. Endocrinology — Metabolism. Drs. Lauler and Thorn.
834. Endocrinology — Metabolism. Dr. Nichols.
835. Endocrinology — Metabolism. Dr. Selenkow.
836. Research in Mathematical Biology. Dr. Bartholomay.
837. Microbiology. Dr. O'Brien.
838. Dermatology II. Dr. I. M. Freedberg. (*Same course as Dermatology 801.*)
839. Gastrointestinal Disease II. Dr. Zamcheck and Associates. (*Same course as Pathology 807.*)
840. Medical Applications in Computer Sciences. Dr. Barnett and Staff.
841. Mechanism of Action of Calorigenic Hormones. Dr. Hoch.

LONGITUDINAL COURSES

701. Advances in Medicine.
702. Advanced Pathophysiology. Dr. Finland and Associates.
703. Atopic Allergic Disease. Dr. Lowell and Associates.
704. Allergy. Dr. Harter.
705. Electrocardiography. Dr. H. D. Levine.
706. Microcirculation and Rheology of Blood. Dr. Wells.
707. Endocrinology — Metabolism. Dr. Emerson.
710. Biomathematics. Dr. Bartholomay.
711. Computer Methods. Dr. Bartholomay.
714. Comprehensive Medical Care II. Drs. Farnsworth, Prout, Crone, Postel, and Associates of the Health Services of Harvard University.
715. Clinical and Investigative Gastroenterology. Dr. Osborne and Associates and Dr. Zamcheck and Associates. (*Same course as Surgery 703.*)
716. Pharmacotherapeutics. Dr. J. Koch-Weser, Associates, and Members of the Department of Medicine. (*Same course as Pharmacology 702.*)

## Department of Neurobiology

Stephen W. Kuffler, M.D., A.M. (hon.), M.D. (hon.), Robert Winthrop Professor of Neurobiology and Head of the Department.

Edwin J. Furshpan, Ph.D., Associate Professor of Neurobiology.

David D. Potter, Ph.D., Associate Professor of Neurobiology.

Edward A. Kravitz, Ph.D., Assistant Professor of Neurobiology.

Robert B. Bosler, Research Associate in Neurobiology.

Anthony O. W. Stretton, Ph.D., Research Associate in Neurobiology.

Judson D. Sheridan, D.Phil., Instructor in Neurobiology.

Monroe W. Cohen, Ph.D., Research Fellow in Neurobiology.

Hersch M. Gerschenfeld, M.D., Research Fellow in Neurobiology (from September 1, 1966).

Clarke R. Slater, Ph.D., Research Fellow in Neurobiology.

Peter Sterling, Ph.D., Research Fellow in Neurobiology (from September 1, 1966).

Kunitaro Takahashi, M.D., Ph.D., Research Fellow in Neurobiology (from January 1, 1967).

Barbara G. Wickelgren, Ph.D., Research Fellow in Neurobiology (from September 1, 1966).

### *Required Course*

Neurobiology A. *First Year.* — Lectures, demonstrations, laboratory exercises, and conferences, given in collaboration with the Department of Anatomy. Structure and function are discussed concurrently and related to each other. The anatomy of the nervous system is described from the level of the fine structure of single cells to surface features of the brain; the physiology from ionic permeability of the nerve cell membrane and synaptic chemistry to integrative activities of the central nervous system. The importance of the cellular connections is emphasized both from physiological and anatomical points of view; certain well-studied systems are studied in detail.

FIRST YEAR HOURS

Lectures. Drs. KUFFLER, PALAY, and ASSOCIATES. One or two hours per day, Monday through Saturday, during the last five weeks (intensive) of the second semester.

Laboratory work and conferences. Drs. KUFFLER, PALAY, and ASSOCIATES. 178

## *Fourth Year Elective Course**

LONGITUDINAL COURSE

701. Physiology and Chemistry of Synaptic Transmission. Drs. KUFFLER, FURSHPAN, D. D. POTTER, and KRAVITZ. (*Same course as Neurophysiology and Neuropharmacology 301, Faculty of Arts and Sciences.*)

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

## Department of Neurology

Raymond D. Adams, M.D., A.M., (hon.), Bullard Professor of Neuropathology, and Head of the Department of Neurology at the Massachusetts General Hospital and Chairman of the Executive Committee of the Department of Neurology.

Charles F. Barlow, M.D., A.M. (hon.), Bronson Crothers Professor of Neurology, and Head of the Department at The Children's Hospital.

Derek E. Denny-Brown, Dr. Phil., M.D., A.M. (hon.), James Jackson Putnam Professor of Neurology, and Head of the Department at the Boston City Hospital.

Alfred Pope, M.D., Professor of Neuropathology at the McLean Hospital.

Charles M. Fisher, M.D., Associate Clinical Professor of Neurology.

Robert S. Schwab, M.D., Associate Clinical Professor of Neurology.

Karl E. Astrom, M.D., Visiting Assistant Professor of Neuropathology (from September 1, 1966).

Philip R. Dodge, M.D., Assistant Professor of Neurology at the Massachusetts General Hospital.

Pierre M. Dreyfus, M.D., Assistant Professor of Neurology at the Massachusetts General Hospital.

Mary L. S. Efron, M.D., Assistant Professor of Neuropathology at the Massachusetts General Hospital.

Simeon Locke, M.D., Assistant Professor of Neurology.

Cesare T. Lombroso, M.D., Assistant Clinical Professor of Neurology.

Edward P. Richardson, Jr., M.D., Assistant Professor of Neuropathology at the Massachusetts General Hospital.

Flaviu C. A. Romanul, M.D., Assistant Professor of Neurology.

Murray Sidman, Ph.D., Assistant Professor of Psychology in the Department of Neurology at the Massachusetts General Hospital.

## NEUROLOGY

Richard L. Sidman, M.D., Assistant Professor of Neuropathology.

William H. Timberlake, M.D., Assistant Clinical Professor of Neurology.

H. Richard Tyler, M.D., Assistant Professor of Neurology.

Henry deF. Webster, M.D., Assistant Professor of Neuropathology at the Massachusetts General Hospital (resigned August 31, 1966).

Samuel H. Epstein, M.D., Clinical Associate in Neurology.

Sid Gilman, M.D., Associate in Neurology.

Chaim I. Mayman, M.D., Associate in Neurology at the Beth Israel Hospital.

Hugo W. Moser, M.D., Associate in Neurology at the Massachusetts General Hospital.

Joseph P. Van Der Meulen, M.D., Associate in Neurology.

James D. Robertson, M.D., Lecturer on Neuropathology (through December 31, 1966).

John S. Barlow, S.M., M.D., Research Associate in Neurology.

Helen H. Hess, M.D., Research Associate in Neuropathology.

Jeanne-Claudie Larroche, M.D., Research Associate in Neuropathology (resigned September 30, 1966).

Harry A. Mackay, Ph.D., Research Associate in Psychology in the Department of Neurology.

Michael J. Malone, M.D., Research Associate in Neurology.

Barbara A. Ray, Ph.D., Research Associate in Psychology in the Department of Neurology.

Remiedios K. Rosales, M.D., Research Associate in Neuropathology.

Maria Z. Salam, M.D., Research Associate in Neuropathology.

Janice R. Stevens, M.D., Research Associate in Neurology (from September 1, 1966).

Lawrence T. Stoddard, Ph.D., Research Associate in Psychology in the Department of Neurology.

Barry G. W. Arnason, M.D., Instructor in Neurology.

Arthur K. Asbury, M.D., Instructor in Neurology.

Mandel E. Cohen, M.D., Instructor in Neurology.

Robert W. P. Cutler, M.D., Instructor in Neurology.

David M. Dawson, M.D., Instructor in Neurology.
Albert C. England, Jr., M.D., Instructor in Neurology.
Robert G. Feldman, M.D., Instructor in Neurology.
Thomas C. Fleming, M.D., Instructor in Neurology.
Floyd H. Gilles, M.D., Instructor in Neurology.
Barbara A. Mella, M.D., Instructor in Neurology.
Leonard D. Osler, M.B., Ch.B., Instructor in Neurology.
Donald H. Osterberg, M.D., Instructor in Neurology.
Vincent P. Perlo, M.D., Instructor in Neurology.
Ernest H. Picard, M.D., Instructor in Neurology.
Arthur L. Prensky, M.D., Instructor in Neurology.
Norman P. Rosman, M.D., C.M., Instructor in Neurology.
Frederick J. Samaha, M.D., Instructor in Neurology.
Mary L. L. Scholl, M.D., Instructor in Neurology.
Bertram Selverstone, M.D., Instructor in Neuropathology.
John F. Sullivan, M.D., Instructor in Neurology.
Karel van S. Toll, M.D., Instructor in Neurology.
Gordon V. Watters, M.D., Instructor in Neurology.
Gerald F. Winkler, M.D., Instructor in Neurology.
Robert E. Flynn, M.D., Assistant in Neurology.
Antonio V. Lorenzo, Ph.D., Assistant in Pharmacology in the Department of Neurology.
Benjamin Matzilevich, M.D., Assistant in Neurology.
Parker A. Towle, M.D., Assistant in Neurology.
Alvan R. Schwartz, M.D., Assistant in Neurology.
Israel F. Abromis, M.B., Ch.B., Research Fellow in Neurology.
Naim K. Atallah, M.D., Research Fellow in Neurology.
John R. Baringer, M.D., Research Fellow in Neuropathology.
Norman H. Bass, M.D., Research Fellow in Neuropathology.
Richard P. Boggs, M.D., Research Fellow in Neurology.
Alfred W. Brann, Jr., M.D., Research Fellow in Neurology.
Fredric K. Cantor, M.D., Research Fellow in Neurology.
Verne S. Caviness, Jr., M.D., D.Phil., Research Fellow in Neurology.
Michael E. Cohen, M.D., Research Fellow in Neurology (resigned October 31, 1966).

## NEUROLOGY

Gerald H. Cohn, M.D., Research Fellow in Neurology (from September 1, 1966).

Joven R. Cuanang, M.D., Research Fellow in Neurology.

George R. DeLong, M.D., Research Fellow in Neuropathology.

Laurent Descarries, M.D., Research Fellow in Neuropathology (resigned December 31, 1966).

Darryl C. DeVivo, M.D., Research Fellow in Neurology.

Frank H. Duffy, M.D., Research Fellow in Neurology.

John M. Eaton, M.D., Research Fellow in Neurology.

Giuseppe Erba, M.D., Research Fellow in Neurology.

Michael L. Finerty, M.D., Research Fellow in Neurology.

Marvin A. Fishman, M.D., Research Fellow in Neurology.

Generoso G. Gascon, M.D., Research Fellow in Neurology.

Paul Gertler, M.D., Research Fellow in Neurology.

Mary A. Giambattista-Ampola, M.D., Research Fellow in Neurology.

John P. Greenberg, M.D., Research Fellow in Neurology.

John F. Griffith, M.D., Research Fellow in Neuropathology.

John P. Hammerstad, M.D., Research Fellow in Neurology.

Rebecca A. Hanson, M.D., Research Fellow in Neurology.

Klaus-Peter Herberg, M.D. (equiv.), Research Fellow in Neurology (through March 15, 1967).

Thomas L. Kemper, M.D., Research Fellow in Neuropathology.

Edwin H. Kolodny, M.D., Research Fellow in Neurology.

Donald J. Kurtz, M.D., Research Fellow in Neurology.

Raymond J. Lasek, Ph.D., Research Fellow in Neuropathology (from September 1, 1966).

Harvey L. Levy, M.D., Research Fellow in Neurology.

James I. Manson, M.B., B.S., Research Fellow in Neurology.

Joest W. Martinius, M.D., Research Fellow in Neurology (through September 30, 1966).

William I. McDonald, M.B., Ch.B., Research Fellow in Neurology (through September 15, 1966).

Donald R. McLean, M.D., Research Fellow in Neurology.

James G. McLeod, M.B., B.S., Dr. Phil., Research Fellow in Neurology (through September 15, 1966).

Hubert S. Mickel, M.D., Research Fellow in Neurology.
Jay P. Mohr, M.D., Research Fellow in Neuropathology.
Michael J. Moore, M.D., Research Fellow in Neuropathology.
Sean F. Murphy, M.B., Ch.B., Research Fellow in Neurology.
Gary J. Myers, M.D., Research Fellow in Neurology.
Andrea H. Nash, M.D., Research Fellow in Neurology.
Mool P. Nigam, M.D., Research Fellow in Neurology.
William H. Olson, Jr., M.D., Research Fellow in Neurology.
Shyam S. Pant, M.B., B.S., Research Fellow in Neurology.
John M. S. Pearce, M.B., Ch.B., Research Fellow in Neuropathology (through December 31, 1966).
Alan L. Pearlman, M.D., Research Follow in Neurology.
George Pearlstein, M.D., Research Fellow in Neurology.
Camillo Peracchia, M.D., Research Fellow in Neuropathology (through April 30, 1967).
Martin Pollock, M.D., Research Fellow in Neurology.
Kenneth S. Posner, M.D., Research Fellow in Neurology.
Martin C. Raff, M.D., Research Fellow in Neuropathology.
Pasko Rakic, M.D., Research Fellow in Neuropathology (through January 31, 1967).
Jean J. Rebeiz, M.D., Research Fellow in Neuropathology.
Roger J. Robinson, M.B., Ch.B., Research Fellow in Neurology (from October 1, 1966).
Virgilio E. Sangalang, M.D., Research Fellow in Neuropathology.
Robert M. Satovick, M.D., Research Fellow in Neurology.
Michael J. Schroder, M.D., Research Fellow in Neuropathology (through September 30, 1966).
Robert A. T. Scott, M.D., Research Fellow in Neurology.
William R. Scott, M.D., Research Fellow in Neurology.
Vivian E. Shih, M.B., Ch.B., Research Fellow in Neurology.
Shin-Ichiro Shimizu, M.D., Milton Research Fellow in Neurology (through September 30, 1966).
Alexander M. Spence, M.D., Research Fellow in Neurology.
Vincent P. Sweeney, M.B., Ch.B., Research Fellow in Neuropathology.

## NEUROLOGY

Anibal S. Tejada-Garcia, M.D., Research Fellow in Neurology.
E. Bruce Tomlinson, M.B., B.S., Research Fellow in Neurology.
Antonio J. Vitug, M.D., Research Fellow in Neurology.
Joel J. West, M.D., Research Fellow in Neurology.
Philip A. Wolf, M.D., Research Fellow in Neurology.
Takeo Yogo, M.D., Sc.D., Research Fellow in Neurology.
Ingeborg van Pelt, M.D., Teaching Fellow in Neurology.

### *Required Courses*

Neurology. *Second Year.* — Clinical lectures are given at the Boston City and Massachusetts General Hospitals to the entire class. The object of the course is to give the student a general knowledge of the principles of diagnosis of diseases of the nervous system as a preparation for later work.

Neurology. *Introduction to the Clinic.* — Individual instruction in case taking will be given during that part of the twelve-week period assigned to Medicine. Each student will spend approximately six four-hour sessions with his instructor, and will have two orientation lectures in addition.

Neurology. *Principal Clinical Year.* — A three-week clerkship is required of each student during the Principal Clinical Year and it may be taken at the B.C.H., M.G.H., or C.H.M.C.-P.B.B.H. For this work the more didactic teaching of the second year serves as a necessary preparation. The work is practical in character and brings the student into immediate contact with patients.

| SECOND YEAR | HOURS |
|---|---|
| Clinical lectures. Dr. Denny-Brown, B.C.H. and Dr. Adams, M.G.H. and Staff. | 10 |
| **INTRODUCTION TO THE CLINIC** | |
| Clinical instruction. Dr. Denny-Brown, B.C.H. and Dr. Adams, M.G.H. and Dr. C. F. Barlow, C.H.M.C. | 26 |
| **PRINCIPAL CLINICAL YEAR** | |
| Clinical Clerkship. Dr. Denny-Brown, B.C.H., Dr. Adams, M.G.H., and Dr. C. F. Barlow, C.H.M.C. | 120 |

## *Fourth Year Elective Courses* *

### BLOCK COURSES

501M. Advanced Study in Clinical Neurology. Dr. DENNY-BROWN.
502M. Advanced Study of Neuropathology. Dr. ROMANUL. (*Same course as Pathology 513M.*)
503M. Pediatric Neurology. Dr. C. F. BARLOW. (*Same course as Pediatrics 517M.*)
504M. Advanced Study in Clinical Neurology. Dr. TIMBERLAKE.
505M. Advanced Study in Clinical Neurology. Dr. R. D. ADAMS.
506M. Pediatric Neurology I. Dr. DODGE. (*Same course as Pediatrics 522M.*)
507M. Pediatric Neurology II. Dr. DODGE. (*Same course as Pediatrics 523M.*)
508M. Pediatric Neurology. Dr. MOSER. (*Same course as Pediatrics 524M.*)
509M. Advanced Study in Neuropathology. Dr. E. P. RICHARDSON. (*Same course as Pathology 514M.*)
510M. Advanced Study in Clinical Neurology. Dr. TYLER.
511M. Neurology and Preventive Medicine. Dr. POSKANZER. (*Same course as Preventive Medicine 504M.*)
512M. Advanced Studies in Seizure Disorders. Dr. LOMBROSO.

### BLOCK COURSES — RESEARCH

801. Advanced Research on Histochemistry of Nerve and Muscle. Dr. ROMANUL.
803. Studies in Neuromuscular Transmission. Dr. LOCKE.
804. Clinical Application of Neurophysiological Techniques. Dr. VAN DER MEULEN.
805. Advanced Research in Blood-Brain Barrier and Related Subjects. Dr. C. F. BARLOW.
806. Biophysics in Neurology (computer techniques). Dr. J. S. BARLOW.
807. Histogenesis of the Normal and Diseased Brain. Dr. R. L. SIDMAN.
808. Advanced Neuroanatomy. Dr. YAKOVLEV.
809. Neuropathology of Developmental Anomalies. Dr. E. P. RICHARDSON.
810. Electron Microscopic Studies of Nervous Disease. Dr. WEBSTER.
811. Biochemistry of Nervous Disease. Drs. MOSER, DREYFUS, GERGELY, and EFRON.
812. Clinical Neurophysiology. Drs. SCHWAB and SCHOLL.
813. Experimental Clinical Psychology — in Normal and Retarded Children. Drs. STODDARD and M. SIDMAN.
814. Studies in Vascular Diseases of the Nervous System. Dr. C. M. FISHER.
815. Microchemical Neuropathology. Drs. POPE, HESS, and MAYMAN.
816M. Computer Techniques in Clinical Neurophysiology. Drs. LOMBROSO and E. A. KRAVITZ.

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

## Neuropathology

### *Required Course*

NEUROPATHOLOGY. *Second Year.* — The course consists of lectures, laboratory work, and demonstrations, amounting to fifty-seven hours. The lectures introduce conceptions of value for the third year courses in neurology and psychiatry and for the neurological parts of courses in internal medicine and in surgery. Microscopical and gross specimens are studied.

| SECOND YEAR | HOURS |
|---|---|
| Lectures and laboratory work. Dr. ADAMS and STAFF. Six times a week, for three and one-half weeks. | 57 |

*Fourth Year Elective Courses* (See page 168)

## Department of Obstetrics and Gynecology

Duncan E. Reid, M.D., A.M. (hon.), William Lambert Richardson Professor of Obstetrics, Kate Macy Ladd Professor of Obstetrics and Gynecology, and Head of the Department of Obstetrics and Gynecology.

George Van S. Smith, M.D., W. H. Baker Professor of Gynecology, and Head of the Division of Gynecology.

Hilton A. Salhanick, Ph.D., M.D., Professor of Obstetrics and Gynecology.

Somers H. Sturgis, M.D., Clinical Professor of Gynecology.

Howard Ulfelder, M.D., Joe Vincent Meigs Professor of Gynecology.

Daniel Abramson, M.D., Associate Clinical Professor of Obstetrics and Gynecology.

Charles L. Easterday, M.D., Associate Clinical Professor of Obstetrics and Gynecology.

Francis M. Ingersoll, M.D., Associate Clinical Professor of Gynecology.

Paul A. Younge, M.D., Associate Clinical Professor of Gynecology.

Joseph J. Barlow, M.D., Assistant Professor of Obstetrics and Gynecology.

Christopher J. Duncan, M.D., Assistant Clinical Professor of Obstetrics and Gynecology.

Thomas H. Green, Jr., M.D., Assistant Clinical Professor of Gynecology.

Richard H. Grogan, M.D., Assistant Clinical Professor of Obstetrics and Gynecology (died February 2, 1967).

John F. Jewett, M.D., Assistant Clinical Professor of Obstetrics and Gynecology.

Robert W. Kistner, M.D., Assistant Clinical Professor of Obstetrics and Gynecology.

William J. Mulligan, M.D., Assistant Clinical Professor of Obstetrics and Gynecology.

Bernardo A. Santamarina, M.D., Assistant Professor of Obstetrics and Gynecology.

Olive W. Smith, Ph.D., Sc.D. (hon.), Assistant Professor of Biological Chemistry in the Department of Obstetrics and Gynecology at the Boston Hospital for Women (Parkway Division).

Melvin L. Taymor, M.D., Assistant Clinical Professor of Gynecology.

Robert H. Barker, M.D., Clinical Associate in Obstetrics and Gynecology.

Luke Gillespie, M.D., Associate in Obstetrics and Gynecology at the Boston Hospital for Women (Lying-in Division).

Harold W. Rubin, M.D., Clinical Associate in Obstetrics and Gynecology.

David H. Gallant, Ph.D., Research Associate in Obstetrics and Gynecology.

Angelyn A. Konugres, Ph.D., Research Associate in Obstetrics and Gynecology.

John A. MacLaren, Ph.D., Research Associate in Obstetrics and Gynecology.

Leona R. Zacharias, Ph.D., Research Associate in Obstetrics and Gynecology.

Theodore C. Barton, M.D., Instructor in Obstetrics and Gynecology, and Tutor in Medical Science.

Maurice O. Belson, M.D., Instructor in Obstetrics and Gynecology.

Max J. Bulian, M.D., Instructor in Obstetrics and Gynecology.

Louis Burke, M.D., Instructor in Obstetrics and Gynecology.

John J. Driscoll, M.D., Instructor in Obstetrics and Gynecology.

A. Gordon Gauld, M.D., Instructor in Obstetrics and Gynecology.

Sumner Gochberg, M.D., Instructor in Obstetrics and Gynecology, and Tutor in Medical Science.

Donald P. Goldstein, M.D., Instructor in Obstetrics and Gynecology.

Arthur C. Gorbach, M.D., Instructor in Obstetrics and Gynecology.

Ward I. Gregg, M.D., Instructor in Gynecology.

Charles T. Griffiths, M.D., Instructor in Obstetrics and Gynecology.

John W. Grover, M.D., Instructor in Obstetrics and Gynecology.

Arthur L. Herbst, M.D., Instructor in Obstetrics and Gynecology.

Crawford H. Hinman, M.D., Instructor in Obstetrics and Gynecology.

Ruby G. Jackson, M.D., C.M., Instructor in Obstetrics and Gynecology.

David E. Kopans, M.D., Instructor in Obstetrics and Gynecology.

Francis R. Lane, M.D., Instructor in Obstetrics and Gynecology.

Thomas Leavitt, Jr., M.D., Instructor in Obstetrics and Gynecology.

Herbert T. Leighton, M.D., Instructor in Obstetrics and Gynecology.

Jacob Mezer, M.D., Instructor in Obstetrics and Gynecology.

John L. Newell, M.D., Instructor in Obstetrics and Gynecology.

Peter G. Robbins, M.D., Instructor in Obstetrics and Gynecology.

George M. Ryan, Jr., M.D., Instructor in Obstetrics and Gynecology.

Leonard E. Safon, M.D., Instructor in Obstetrics and Gynecology.

Weston F. Sewall, M.D., Instructor in Obstetrics and Gynecology.

Lloyd I. Sexton, M.D., Instructor in Obstetrics and Gynecology.

Sumner A. Smith, M.D., Instructor in Obstetrics and Gynecology.

Bartlett H. Stone, M.D., Instructor in Obstetrics and Gynecology.

Arthur W. Tucker, Jr., M.D., Instructor in Obstetrics and Gynecology.

Albert E. Weiner, M.D., Instructor in Obstetrics and Gynecology.

David Weintraub, M.D., Instructor in Obstetrics and Gynecology.

Clement Yahia, M.D., Instructor in Obstetrics and Gynecology.

James H. Austin, M.D., Assistant in Obstetrics and Gynecology.

Warren J. Becker, M.D., Assistant in Obstetrics and Gynecology.

Samuel M. Berger, M.B., Ch.B., Assistant in Obstetrics and Gynecology.

Herbert E. Brooks, Jr., M.D., Assistant in Obstetrics and Gynecology.

Dick A. J. Brown, M.D., Assistant in Obstetrics and Gynecology.

Robert W. Brown, M.D., Assistant in Obstetrics and Gynecology.

Robert V. Dandrow, Jr., M.D., Assistant in Obstetrics and Gynecology.

Thomas J. Dowd, M.D., Assistant in Obstetrics and Gynecology (from August 1, 1966).

Charles F. Eades, M.D., Assistant in Obstetrics and Gynecology.

Albert Y. Kevorkian, M.D., Assistant in Gynecology.

Harold J. Kosasky, M.D., Assistant in Obstetrics and Gynecology.

Lawrence J. Malone, M.D., Assistant in Obstetrics and Gynecology.

Jack H. Marcovitch, M.D., Assistant in Obstetrics and Gynecology.

Robert Marnoy, M.D., Assistant in Obstetrics and Gynecology.

Joseph H. Phillips, M.D., Assistant in Gynecology.

Elliot Rivo, M.D., Assistant in Obstetrics and Gynecology.

Seymour Sacks, M.D., Assistant in Obstetrics and Gynecology.

Arthur J. Schramm, M.D., Assistant in Obstetrics and Gynecology.

Ernest H. Smith, M.D., Assistant in Obstetrics and Gynecology

Stephen B. Smith, M.D., Assistant in Obstetrics and Gynecology.

Sidney Stahler, M.D., Assistant in Obstetrics and Gynecology.

Joseph S. Wallace, M.D., Assistant in Obstetrics and Gynecology.

Robert E. Wheatley, M.D., Assistant in Obstetrics and Gynecology.

Toshihiro Aono, M.D., Research Fellow in Obstetrics and Gynecology.

Conrado L. Lorenzo, M.D., Research Fellow in Obstetrics and Gynecology.

Robert H. Margulis, M.D., Research Fellow in Obstetrics and Gynecology.

Edward N. McIntosh, M.D., Research Fellow in Obstetrics and Gynecology.

Najla Naaman, M.D., Research Fellow in Obstetrics and Gynecology (from December 1, 1966).

Tatsuji Ohsawa, M.D., Research Fellow in Obstetrics and Gynecology (from November 1, 1966).

Grant W. Patton, Jr., M.D., Research Fellow in Obstetrics and Gynecology.

Richard R. Smith, M.D., Research Fellow in Obstetrics and Gynecology.

Richard H. Underwood, B.Sc., Research Fellow in Obstetrics and Gynecology.

Carl A. Anderson, M.D., Teaching Fellow in Obstetrics and Gynecology.

Jean A. Arakgui, M.B., Ch.B., Teaching Fellow in Obstetrics and Gynecology.

Ralph D. Aserkoff, M.D., Teaching Fellow in Obstetrics and Gynecology.

David S. Bard, M.D., Teaching Fellow in Obstetrics and Gynecology.

Ann R. B. Barnes, M.D., Teaching Fellow in Obstetrics and Gynecology.

Kenneth E. Blotner, M.D., Teaching Fellow in Obstetrics and Gynecology.

Alan N. Fleckner, M.D., Teaching Fellow in Obstetrics and Gynecology.

Ernest W. Franklin, 3d, M.D., Teaching Fellow in Obstetrics and Gynecology.

Fredric D. Frigoletto, M.D., Teaching Fellow in Obstetrics and Gynecology (through March 31, 1967).

David A. Horowitz, M.B., Ch.B., Teaching Fellow in Obstetrics and Gynecology.

Howard L. Judd, M.D., Teaching Fellow in Obstetrics and Gynecology.

Kermit L. Kenler, M.D., Teaching Fellow in Obstetrics and Gynecology.

Il Kim, M.D., Teaching Fellow in Obstetrics and Gynecology.

John M. Leventhal, M.D., Teaching Fellow in Obstetrics and Gynecology (through September 30, 1966).

Moussa I. Menasha, M.B., Ch.B., Teaching Fellow in Obstetrics and Gynecology.

Kenneth I. Scheer, M.D., Teaching Fellow in Obstetrics and Gynecology.

Howard I. Shapiro, M.D., Teaching Fellow in Obstetrics and Gynecology.

Frederick H. Sillman, M.D., Teaching Fellow in Obstetrics and Gynecology (through December 31, 1966).

John Z. Yeransian, M.D., Teaching Fellow in Obstetrics and Gynecology.

James E. Zuckerman, Jr., M.D., Teaching Fellow in Obstetrics and Gynecology.

## *Required Courses*

Obstetrics and Gynecology. *Second Year.* — Whole class exercises in conjunction with the Departments of Medical Science and the several clinical disciplines, covering the broad aspects of the physiology and pathophysiology of reproduction and femaleness. Emphasis is placed on embryology, pathology, and endocrinology of the reproductive systems, both male and female.

Obstetrics and Gynecology. *Introduction to the Clinic.* — Instruction will be given in participation with other clinical departments.

Obstetrics and Gynecology. *Principal Clinical Year.* — The stu-

dent devotes six weeks to clinical Obstetrics and Gynecology at the Boston City Hospital, the Beth Israel Hospital, the Boston Hospital for Women, and the Massachusetts General Hospital He participates in the management of labor and delivery and takes part in the care of the mother and her infant during their hospital stay. He also receives instruction in the interaction of medical and surgical disease in pregnancy and in gynecological conditions, and assists at operations. In addition, he attends Obstetric and Medical Grand Rounds, Clinicopathological Conferences, and clinical seminars throughout the course.

SECOND YEAR — HOURS

Participation in pathophysiology endocrine system. 18

INTRODUCTION TO THE CLINIC

Practical instruction and seminars in clinical obstetrics and gynecology.

PRINCIPAL CLINICAL YEAR

Clinical obstetrics and gynecology. Drs. Reid, Smith, Sturgis, Ulfelder, and Associates. 240

## *Fourth Year Elective Courses* *

BLOCK COURSES

501M. Gynecologic Oncology. Dr. Grogan.
502M. Fertility and Endocrinology. Dr. Mulligan.
503M. Ovarian Endocrinology. Dr. Kistner.
505M. Care of Women. Dr. G. V. Smith.
506M. Obstetrical Anesthesia and Analgesia. Dr. J. B. Weiss.
507M. Advanced Obstetrics and Gynecology. Dr. Reid and Associates.
511M. Comprehensive Gynecology. Dr. S. H. Sturgis. (*Same course as Surgery 524M.*)
512M. Gynecologic Endocrinology. Experience in Clinical and Laboratory Diagnosis. Dr. Taymor.
513M. Endocrinology with Special Reference to the Ovary. Drs. Ulfelder, G. S. Richardson, McArthur, and Scully. (*Same course as Surgery 507M.*)

BLOCK COURSES — RESEARCH

801. Laboratory Course in Ovarian Estrogen Metabolism. Dr. G. S. Richardson.

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

## OBSTETRICS AND GYNECOLOGY

803. Diagnostic Laboratory Methods including Instruction in Laboratory Gonadotrophin Determinations both Biologic and Immunologic, and Steroid Assay. Dr. TAYMOR.
804. Biochemistry of Reproduction. Dr. HAGERMAN.
807. Membrane Permeability. Dr. BARTON.
808. Immunologic Aspects of Pregnancy. Dr. MACLAREN.
810. Laboratory and Clinical Course in the Epidemiology of Prematurity. Drs. LITTLE, KASS and ASSOCIATES.
812. Biochemistry of Embryonic Development and Cell Differentiation. Dr. C. A. VILLEE. (*Same course as Biological Chemistry 807.*)
813. Research in Basic or Clinical Aspects of Reproduction. Dr. SALHANICK.
814. Estrogen Biosynthesis and Metabolism and Gynecologic Endocrinology. Dr. J. J. BARLOW.

## Department of Ophthalmology

David G. Cogan, M.D., Henry Willard Williams Professor of Ophthalmology, Head of the Department, and Director of the Howe Laboratory of Ophthalmology.

Henry F. Allen, M.D., Associate Clinical Professor of Ophthalmology.

W. Morton Grant, M.D., Associate Professor of Ophthalmology at the Massachusetts Eye and Ear Infirmary.

Carl C. Johnson, M.D., Associate Clinical Professor of Ophthalmology.

Jin H. Kinoshita, Ph.D., Associate Professor of Biochemical Ophthalmology.

Toichiro Kuwabara, M.D., A.M. (hon.), Associate Professor of Pathology in the Department of Ophthalmology at the Massachusetts Eye and Ear Infirmary.

David D. Donaldson, M.D., Assistant Professor of Ophthalmology at the Massachusetts Eye and Ear Infirmary.

Albert E. Sloane, M.D., Assistant Clinical Professor of Ophthalmology.

Taylor R. Smith, M.D., Assistant Clinical Professor of Ophthalmology.

Paul Boeder, Ph.D., Lecturer on Ophthalmology.

John S. Andrews, Jr., Ph.D., Associate in Ophthalmic Research at the Massachusetts Eye and Ear Infirmary (resigned August 31, 1966).

Charles L. Schepens, M.D., Clinical Associate in Ophthalmology.

Alfred W. Scott, M.D., Clinical Associate in Ophthalmology.

Garrett L. Sullivan, Jr., M.D., Clinical Associate in Ophthalmology.

Endre A. Balazs, M.D., Lecturer on Ophthalmology.

Russell L. Carpenter, Ph.D., Lecturer on Ophthalmology.

Mahlon T. Easton, M.D., Lecturer on Ophthalmology.

Ephraim Friedman, M.D., Lecturer on Ophthalmology.

Abraham Pollen, M.D., Lecturer on Ophthalmology.

William M. Haining, M.B., Ch.B., Research Associate in Ophthalmology.
Robert D. Reinecke, M.D., Research Associate in Ophthalmology.
Saul A. Boruchoff, M.D., Instructor in Ophthalmology.
Harry E. Braconier, M.D., Instructor in Ophthalmology.
Robert J. Brockhurst, M.D., Instructor in Ophthalmology.
Thomas J. Cavanaugh, M.D., C.M., Instructor in Ophthalmology (died September 20, 1966).
Claes-Henrik Dohlman, M.D., Ph.D., Instructor in Ophthalmology.
John M. Hill, M.D., Instructor in Ophthalmology.
Sumner D. Liebman, M.D., Instructor in Ophthalmology.
Henry A. Mosher, M.D., Instructor in Ophthalmology.
Charles D. J. Regan, M.D., Instructor in Ophthalmology.
Liane Reif, Ph.D., Instructor in Ophthalmic Research (from September 15, 1966).
Karl Riemer, M.D., Instructor in Ophthalmology.
Baruch J. Sachs, M.D., Instructor in Ophthalmology.
Earl S. Seale, M.D., Instructor in Ophthalmology.
Richard J. Simmons, M.D., Instructor in Ophthalmology.
Francis J. West, M.D., Instructor in Ophthalmology.
Jeremy B. Whitney, M.D., Instructor in Ophthalmology.
Ernst G. G. Wolf, Ph.D., Instructor in Ophthalmology.
Lloyd M. Aiello, M.D., Assistant in Ophthalmology.
David R. Alpert, M.D., Assistant in Ophthalmology.
Frederic B. Breed, M.D., Assistant in Ophthalmology.
John M. Carroll, M.D., Assistant in Ophthalmology.
Richard B. Chapman, M.D., Assistant in Ophthalmology.
Eugene C. Ciccarelli, M.D., Assistant in Ophthalmology.
Thomas P. Cronin, M.D., Assistant in Ophthalmology.
Carl G. Freese, Jr., M.D., Assistant in Ophthalmology.
George E. Garcia, M.D., Assistant in Ophthalmology.
John R. Gehring, M.D., Assistant in Ophthalmology.
Warren D. Haley, M.D., Assistant in Ophthalmology.
Ralph H. Hinckley, M.D., Assistant in Ophthalmology.

Roland E. Houle, M.D., Assistant in Ophthalmology.
Bernard T. Hutchinson, M.D., Assistant in Ophthalmology.
Robert C. Lawlor, M.D., Assistant in Ophthalmology.
Simmons Lessell, M.D., Assistant in Ophthalmology.
Byron S. Lingeman, M.D., Assistant in Ophthalmology.
John W. McMeel, M.D., Assistant in Ophthalmology.
George M. Olive, Jr., M.D., Assistant in Ophthalmology.
Robert A. Petersen, M.D., Dr.Med.Sci., Assistant in Ophthalmology.
Richard M. Robb, M.D., Assistant in Ophthalmology.
Perry Rosenthal, M.D., Assistant in Ophthalmology.
David H. Scott, M.D., Assistant in Ophthalmology.
Michael Wiedman, M.D., Assistant in Ophthalmology.
Arthur M. Clements, M.D., Research Fellow in Ophthalmology.
Ivar Hörven, M.D., Research Fellow in Ophthalmology (through August 31, 1966).
Judith A. Jedziniak, Ph.D., Research Fellow in Ophthalmology (from October 1, 1966).
Joseph Michon, Jr., M.D., Research Fellow in Ophthalmology.
John W. Reed, M.D., Research Fellow in Ophthalmology (through September 30, 1966).
Philip H. Zweifach, M.D., Research Fellow in Ophthalmology.
Ernest H. Christman, M.D., Teaching Fellow in Ophthalmology (through January 31, 1967).
Stephen J. Fricker, M.D., Teaching Fellow in Ophthalmology (through April 30, 1967).
Laurus W. Lehwalder, M.D., Teaching Fellow in Ophthalmology.
Howard M. Leibowitz, M.D., Teaching Fellow in Ophthalmology (through January 31, 1967).
Bernard L. McGowan, M.D., Teaching Fellow in Ophthalmology (through October 31, 1966).
Ronald C. Pruett, M.D., Teaching Fellow in Ophthalmology (from January 1, 1967).
Arturo R. Quevedo, M.D., Teaching Fellow in Ophthalmology (from January 1, 1967).

## OPHTHALMOLOGY

Charles R. Roberts, M.D., Teaching Fellow in Ophthalmology (through April 30, 1967).

Richard A. Thoft, M.D., Teaching Fellow in Ophthalmology (from October 1, 1966).

David S. Walton, M.D., Teaching Fellow in Ophthalmology (from October 1, 1966).

### *Required Courses*

Ophthalmology. *Introduction to the Clinic.* — Lectures and laboratory sessions.

Ophthalmology. *Principal Clinical Year.* — Clinical Ophthalmology.

| INTRODUCTION TO THE CLINIC | HOURS |
|---|---|
| Lectures and laboratory sessions | 9 |

| PRINCIPAL CLINICAL YEAR | |
|---|---|
| Clinical Ophthalmology | 40 |

### *Fourth Year Elective Courses* *

BLOCK COURSE

501M. Ophthalmology I. Dr. A. W. Scott and Associates.

BLOCK COURSE — RESEARCH

801. Ophthalmology II. Drs. Cogan, A. W. Scott, and Associates.

### Howe Laboratory of Ophthalmology

David G. Cogan, M.D., Henry Willard Williams Professor of Ophthalmology, Head of the Department, and Director of the Howe Laboratory of Ophthalmology.

W. Morton Grant, M.D., Associate Professor of Ophthalmology at the Massachusetts Eye and Ear Infirmary.

Jin H. Kinoshita, Ph.D., Associate Professor of Biochemical Ophthalmology.

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

Toichiro Kuwabara, M.D., A.M. (hon.), Associate Professor of Pathology in the Department of Ophthalmology at the Massachusetts Eye and Ear Infirmary.

David D. Donaldson, M.D., Assistant Professor of Ophthalmology at the Massachusetts Eye and Ear Infirmary.

John S. Andrews, Jr., Ph.D., Associate in Ophthalmic Research at the Massachusetts Eye and Ear Infirmary (resigned August 31, 1966).

William M. Haining, M.B., Ch.B., Research Associate in Ophthalmology.

Robert D. Reinecke, M.D., Research Associate in Ophthalmology.

Jeremy B. Whitney, M.D., Instructor in Ophthalmology.

Eugene C. Ciccarelli, M.D., Assistant in Ophthalmology.

The Howe Laboratory of Ophthalmology was founded in 1927 by the late Dr. Lucien Howe. A sum of money equal to that initially given by Dr. Howe was donated by the Rockefeller Foundation. Laboratory space was provided by the Massachusetts Eye and Ear Infirmary.

The purpose of the Laboratory is to advance ophthalmology; its researches are not restricted to any particular phase of this science. Advantage is taken of the rich clinical material of the Infirmary. While the Laboratory is purely an institution for research, the services of the various members of the staff are available for teaching in the Harvard Medical School and for assistance in the clinical work of the Infirmary.

## Department of Orthopedic Surgery

Melvin J. Glimcher, M.D., Edith M. Ashley Professor of Orthopedic Surgery, and Head of the Department at the Massachusetts General Hospital.

William T. Green, M.D., S.D. (hon.), A.M. (hon.), Harriet M. Peabody Professor of Orthopedic Surgery, and Head of the Department at The Children's Hospital.

Thornton Brown, M.D., Associate Clinical Professor of Orthopedic Surgery.

Otto E. Aufranc, M.D., Assistant Clinical Professor of Orthopedic Surgery.

Henry H. Banks, M.D., Assistant Clinical Professor of Orthopedic Surgery.

Jonathan Cohen, M.D., Assistant Clinical Professor of Orthopedic Surgery.

William H. Harris, M.D., Assistant Clinical Professor of Orthopedic Surgery.

Paul W. Hugenberger, M.D., Lecturer on Orthopedic Surgery.

Paul P. Griffin, M.D., Clinical Associate in Orthopedic Surgery.

Donald S. Pierce, M.D., Clinical Associate in Orthopedic Surgery.

Arthur W. Trott, M.D., Clinical Associate in Orthopedic Surgery.

Theodore A. Potter, M.D., Lecturer on Orthopedic Surgery.

Anthony L. Andrikides, Ph.D., Research Associate in Biological Chemistry in the Department of Orthopedic Surgery.

Elton P. Katz, Ph.D., Research Associate in Biological Chemistry in the Department of Orthopedic Surgery.

Murray V. King, Ph.D., Research Associate in Biological Chemistry in the Department of Orthopedic Surgery (through November 30, 1966).

Gerald L. Mechanic, Ph.D., Research Associate in Biological Chemistry in the Department of Orthopedic Surgery.

Dorothy F. Travis, Ph.D., Research Associate in Biology in the Department of Orthopedic Surgery.

Frank D. Bates, M.D., Instructor in Orthopedic Surgery.

Robert J. Boyd, M.D., Instructor in Orthopedic Surgery.

Robert B. Brendze, M.D., Instructor in Orthopedic Surgery.

Hugh P. Chandler, M.D., Instructor in Orthopedic Surgery.

Thomas L. DeLorme, M.D., Instructor in Orthopedic Surgery.

William N. Jones, M.D., Instructor in Orthopedic Surgery.

William L. Kermond, M.B., B.S., Instructor in Orthopedic Surgery.

J. Drennan Lowell, M.D., Instructor in Orthopedic Surgery.

William R. MacAusland, Jr., M.D., Instructor in Orthopedic Surgery.

James G. Manson, M.B., Ch.B., Instructor in Orthopedic Surgery.

John B. McGinty, M.D., Instructor in Orthopedic Surgery.

Edward A. Nalebuff, M.D., Instructor in Orthopedic Surgery.

Paul I. O'Brien, M.D., Instructor in Orthopedic Surgery.

Arthur M. Pappas, M.D., Instructor in Orthopedic Surgery.

Eugene E. Record, M.D., Instructor in Orthopedic Surgery.

John A. Reidy, M.D., Instructor in Orthopedic Surgery.

Edward J. Riseborough, M.B., Ch.B., Instructor in Orthopedic Surgery.

Carter R. Rowe, M.D., Instructor in Orthopedic Surgery.

Clement B. Sledge, M.D., Instructor in Orthopedic Surgery.

Morten Smith-Petersen, M.D., Instructor in Orthopedic Surgery.

Roderick H. Turner, M.D., Instructor in Orthopedic Surgery.

Robert Ulin, M.D., Instructor in Orthopedic Surgery.

Edwin T. Wyman, Jr., M.D., Instructor in Orthopedic Surgery.

Seymour Zimbler, M.D., Instructor in Orthopedic Surgery.

Willard E. Dotter, M.D., Assistant in Orthopedic Surgery.

Edwin R. Guise, M.D., Assistant in Orthopedic Surgery.

Robert E. Leach, M.D., Assistant in Orthopedic Surgery

William R. Torgerson, Jr., M.D., Assistant in Orthopedic Surgery.

Marvin S. Weinfeld, M.D., Assistant in Orthopedic Surgery.

John R. Auty, Ph.D., Research Fellow in Orthopedic Surgery.

John E. Kenzora, M.D., Research Fellow in Orthopedic Surgery.

Panos G. Panagakos, M.D., Research Fellow in Orthopedic Surgery.

Jerome M. Seyer, Ph.D., Research Fellow in Orthopedic Surgery.

Hershey Warshawsky, Ph.D., Research Fellow in Orthopedic Surgery.

Zvi H. Yosipovitch, M.D., Research Fellow in Orthopedic Surgery (from September 1, 1966).

Michael A. Ashworth, M.D., Teaching Fellow in Orthopedic Surgery (from January 1, 1967).

Benjamin E. Bierbaum, M.D., Teaching Fellow in Orthopedic Surgery (from January 1, 1967).

Carl F. Brunjes, M.D., Teaching Fellow in Orthopedic Surgery (from October 1, 1966).

David W. Grainger, M.D., Teaching Fellow in Orthopedic Surgery (from January 1, 1967).

William T. Green, Jr., M.D., Teaching Fellow in Orthopedic Surgery (from April 1, 1967).

David L. Hamblen, M.B., B.S., Teaching Fellow in Orthopedic Surgery.

John E. Larkin, M.D., Teaching Fellow in Orthopedic Surgery (through September 30, 1966).

Charles L. Renshaw, M.D., Teaching Fellow in Orthopedic Surgery (through December 31, 1966).

Joseph L. Shaw, M.D., Teaching Fellow in Orthopedic Surgery (through December 31, 1966).

William H. Sullivan, M.D., Teaching Fellow in Orthopedic Surgery (through September 30, 1966).

William H. Thomas, M.D., Teaching Fellow in Orthopedic Surgery (through March 31, 1967).

Henry S. Urbaniak, M.D., Teaching Fellow in Orthopedic Surgery (from October 1, 1966 through March 31, 1967).

## *Required Courses*

ORTHOPEDIC SURGERY. *Second Year.* — The department participates in the instruction during the musculoskeletal section of Pathophysiology and in the Examination of the Patient.

ORTHOPEDIC SURGERY. *Introduction to the Clinic* and *Principal Clinical Year.* — Instruction is given in orthopedic surgery during the Introduction to the Clinic by sectional assignments and by three lecture-symposial exercises to the whole class, and during the Principal Clinical Year by clerkships of three weeks duration.

| SECOND YEAR | HOURS |
|---|---|
| Participation in pathophysiology musculoskeletal section. | 18 |

INTRODUCTION TO THE CLINIC

Clinical exercises. Drs. GREEN, GLIMCHER, BROWN, BANKS, TROTT, O'BRIEN, ZIMBLER, and ASSOCIATES. C.H.M.C., M.G.H., P.B.B.H., B.I.H., and B.C.H. In sections throughout the period. 8

PRINCIPAL CLINICAL YEAR

Ward clerkships. Drs. GREEN, GLIMCHER, BROWN, BANKS, TROTT, and ASSOCIATES. C.H.M.C., M.G.H., P.B.B.H. The three week clerkship is spent either at the Massachusetts General Hospital or at The Children's Hospital Medical Center and Peter Bent Brigham Hospital, with combined exercises for both groups on schedule at the Children's Hospital Medical Center and the Massachusetts General Hospital. 120

## *Fourth Year Elective Courses* *

BLOCK COURSES

501M. Children's Orthopedics. Drs. W. T. GREEN, TROTT, and ASSOCIATES.
502M. Adult Orthopedics. Drs. W. T. GREEN, BANKS, and ASSOCIATES.
503M. Children and Adults. Drs. W. T. GREEN, BANKS, and ASSOCIATES.
504M. Functional Anatomy, Biomechanics, and Reconstructive Surgery. Drs. KERMOND and PIERCE. (*Same course as Medicine 541M.*)

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

505M. Clinical Orthopedic Surgery, Fractures, and Trauma. Drs. T. Brown, Aufranc, and Associates.
506M. Skiing Injuries. Drs. Ellison and Wolf.

BLOCK COURSES — RESEARCH

801. Musculoskeletal System. Dr. Banks.
802. Musculoskeletal System. Dr. Cohen.
804. Biologic Performances of Bone. Dr. Pappas.
805. Biological Mineralization. Dr. Glimcher and Associates.
806. Electrophysiology of Skeletal Muscle. Dr. Pierce.

LONGITUDINAL COURSES

701. Trauma. Drs. Moore, W. T. Green, Banks, Quigley, Matson, Harrison, Vandam, and Morgan. (*Same course as Surgery 706.*)
702. Fractures and Related Trauma. Drs. W. T. Green, Banks, Trott, Quigley, and Associates.

## Department of Otology and Laryngology

Harold F. Schuknecht, M.D., A.M. (hon.), Walter Augustus Lecompte Professor of Otology, Professor of Laryngology, and Head of the Department.

Allan C. Goodman, Ph.D., Assistant Professor of Audiology in the Department of Otolaryngology at The Children's Hospital.

William W. Montgomery, M.D., Assistant Professor of Otology at the Massachusetts Eye and Ear Infirmary.

John R. Richardson, M.D., Assistant Clinical Professor of Laryngology.

John W. Irwin, M.D., Research Associate in Otolaryngology.

Nelson Y. Kiang, Ph.D., Research Associate in Otolaryngology.

Robert S. Kimura, A.B., Research Associate in Otolaryngology.

Swiatopolk P. Marfey, Ph.D., Research Associate in Biological Chemistry in the Department of Otolaryngology.

Walter A. Rosenblith, Ing.Rad., Research Associate in Otology.

Hugo D. Angelini, M.D., Instructor in Otolaryngology.

Werner D. Chasin, M.D., Instructor in Otolaryngology.

Joshua C. Drooker, M.D., Instructor in Otolaryngology.

Charles F. Ferguson, M.D., Instructor in Otolaryngology.

Carlyle G. Flake, M.D., Instructor in Otolaryngology.

Leo T. Kelly, M.D., Instructor in Anaesthesia in the Department of Otolaryngology.

Robert E. Klotz, M.D., Instructor in Otolaryngology.

Joseph Lentine, M.D., Instructor in Otolaryngology.

Donald K. Lewis, M.D., Instructor in Otolaryngology.

Aram Roopenian, M.D., Instructor in Otolaryngology.

Yale J. Berry, M.D., Assistant in Otolaryngology.

Robert W. Clubb, D.M.D., M.D., Assistant in Otolaryngology.

Eugene H. Courtiss, M.D., Assistant in Otolaryngology.

Allen G. Edwards, Jr., M.D., Assistant in Otolaryngology.

Richard R. Gacek, M.D., Assistant in Otolaryngology.

Charles W. Gross, M.D., Assistant in Otolaryngology.
William L. Hayden, M.D., Assistant in Otolaryngology.
Roy A. Johnson, M.D., Assistant in Otolaryngology.
Donald G. Keamy, M.D., Assistant in Otolaryngology.
John M. Kurkjian, M.D., Assistant in Otolaryngology.
Robert H. Lofgren, M.D., Assistant in Otolaryngology.
David L. Pierce, M.D., Assistant in Otolaryngology.
Sydney Shore, M.D., Assistant in Otolaryngology.
Alfred D. Weiss, M.D., Assistant in Otolaryngology.
Anthony Zovickian, M.D., Assistant in Otolaryngology.
Abdel F. Allam, M.B., Ch.B., Research Fellow in Otolaryngology.
David G. Davies, M.B., B.S., Research Fellow in Otolaryngology.
Daiji Ishii, M.D., Research Fellow in Otolaryngology.
Tetsuo Ishii, M.D., Research Fellow in Otolaryngology (through August 31, 1966).
Alan G. Kerr, M.B., Ch.B., Research Fellow in Otolaryngology (from January 1, 1967).
Yoshihiko Murakami, M.D., Research Fellow in Otolaryngology.
William N. Campbell, M.D., Teaching Fellow in Otolaryngology.
Clarence E. Kylander, M.D., Teaching Fellow in Otolaryngology.
Rufus C. Partlow, Jr., M.D., Teaching Fellow in Otolaryngology.
Richard D. Salerno, M.D., Teaching Fellow in Otolaryngology.
John J. Stavros, M.D., Teaching Fellow in Otolaryngology.

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Affiliated:
John S. Irwin, M.D., Research Associate in Microcirculation, M.I.T.

### *Required Course*

Otology and Laryngology. *Introduction to the Clinic* and *Principal Clinical Year.* — Lectures and clinical instruction at the School and the hospitals.

INTRODUCTION TO THE CLINIC HOURS

Lectures and Clinical Instruction. Dr. SCHUKNECHT and ASSOCIATES. 9

PRINCIPAL CLINICAL YEAR

Clinical Instruction (groups of four or five), Seminars (groups of nine) given at the M.E.E.I. Seminars: Monday, Tuesday, and Wednesday 8:00–9:00 a.m. Clinical Exercises: 9:00 a.m.–12:30 p.m. alternate mornings and one afternoon 1:00–3:00 p.m. Each student has ten sessions of clinical instruction. Dr. SCHUKNECHT and ASSOCIATES. 36

## *Fourth Year Elective Course**

BLOCK COURSE

501M. Clinical Otolaryngology. Dr. SCHUKNECHT and ASSOCIATES.

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

## Department of Pathology

Arthur T. Hertig, M.D., Shattuck Professor of Pathological Anatomy, and Head of the Department.

Benjamin Castleman, M.D., Professor of Pathology at the Massachusetts General Hospital.

John M. Craig, M.D., Clinical Professor of Pathology.

Gustave J. Dammin, M.D., A.M. (hon.), Elsie T. Friedman Professor of Pathology.

Sidney Farber, M.D., D.Sc. (hon.), M.D. (hon.), Professor of Pathology at The Children's Hospital.

David G. Freiman, M.D., A.M. (hon.), Professor of Pathology at the Beth Israel Hospital.

Olive Gates, M.D., Clinical Professor of Pathology.

William A. Meissner, M.D., Clinical Professor of Pathology.

Richard B. Cohen, M.D., Associate Clinical Professor of Pathology.

Thomas C. Jones, D.V.M., Associate Clinical Professor of Pathology.

Morris J. Karnovsky, M.B., Ch.B., A.M. (hon.), Associate Professor of Pathology, and Tutor in Pathology.

Philip M. LeCompte, M.D., Associate Clinical Professor of Pathology.

Guido Majno, M.D., A.M. (hon.), Associate Professor of Pathology (on leave January 22, 1967 through April 22, 1967).

Agnes B. Russfield, Ph.D., M.D., Associate Clinical Professor of Pathology.

Robert E. Scully, M.D., Associate Clinical Professor of Pathology.

Edgar B. Taft, M.D., Associate Clinical Professor of Pathology.

Gordon F. Vawter, M.D., Associate Clinical Professor of Pathology.

Austin L. Vickery, Jr., M.D., Associate Clinical Professor of Pathology.

Leonard Atkins, M.D., Assistant Clinical Professor of Pathology.

James B. Caulfield, M.D., Assistant Professor of Pathology at the Massachusetts General Hospital.

Wallace H. Clark, Jr., M.D., Assistant Professor of Pathology at the Massachusetts General Hospital.

Bradley E. Copeland, M.D., Assistant Clinical Professor of Pathology.

Ramzi S. Cotran, M.D., Assistant Professor of Pathology.

John E. Craighead, M.D., Assistant Professor of Pathology.

Alastair W. Cunningham, M.B., Ch.B., Assistant Professor of Pathology at the Peter Bent Brigham Hospital (from January 1, 1967).

George W. Curtis, M.D., Assistant Clinical Professor of Pathology.

Shirley G. Driscoll, M.D., Assistant Clinical Professor of Pathology.

Martin H. Flax, Ph.D., M.D., Assistant Professor of Pathology at the Massachusetts General Hospital.

Thomas J. Gill, 3d, M.D., Assistant Professor of Pathology.

Hazel M. Gore, M.B., Ch.B., Assistant Professor of Pathology.

Earl "E" Hellerstein, M.D., Assistant Professor of Pathology.

Johannes P. Kulka, M.D., Assistant Clinical Professor of Pathology.

Si-Chun Ming, M.D., Assistant Professor of Pathology at the Beth Israel Hospital.

Franz von Lichtenberg, M.D., Assistant Professor of Pathology at the Peter Bent Brigham Hospital.

Robert Fienberg, M.D., Lecturer on Pathology.

George E. Foley, D.Sc., Lecturer on Pathology.

Hermann Lisco, M.D., Lecturer on Pathology, and Assistant Dean of the Faculty of Medicine for Student Affairs (from January 1, 1967).

Bernard F. Trum, D.V.M., Lecturer on Veterinary Medicine in the Department of Pathology, Director of the Animal Research Center and Director of the New England Regional Primate Research Center.

Thomas P. Ashford, M.D., Associate in Pathology at the Beth Israel Hospital.

Karoly Balogh, M.D., Associate in Pathology at the Massachusetts General Hospital.

Joseph M. Corson, M.D., Associate in Pathology.

Diane W. Crocker, M.D., Associate in Pathology at the Peter Bent Brigham Hospital.

George T. Diamandopoulos, M.D., Associate in Pathology.

Robert L. Ehrmann, M.D., Clinical Associate in Pathology.

Hossein-Dariush Fahimi, M.D., Associate in Pathology.

Wallace A. Jones, M.D., Clinical Associate in Pathology.

Merle A. Legg, M.D., C.M., Clinical Associate in Pathology.

Arthur A. Like, M.D., Associate in Pathology.

Edward S. Reynolds, Jr., M.D., Associate in Pathology at the Peter Bent Brigham Hospital.

Sanford I. Roth, M.D., Associate in Pathology at the Massachusetts General Hospital.

Stephen M. Shea, M.B., Ch.B., M.D., Associate in Pathology.

Priscilla D. Taft, M.D., Clinical Associate in Pathology.

D. Richard Van Praagh, M.D., Clinical Associate in Pathology.

Hubert J. Wolfe, M.D., Associate in Pathology at the Massachusetts General Hospital.

Gilbert H. Friedell, M.D., Lecturer on Pathology.

Edward A. Gall, M.D., Visiting Lecturer on Pathology (March 28, 1967 through April 3, 1967).

Ira Gore, M.D., Lecturer on Pathology.

Leonard S. Gottlieb, M.D., Lecturer on Pathology.

James H. Graham, M.D., Lecturer on Pathology.

Oscar A. Iseri, M.D., Lecturer on Pathology.

Arthur J. McBay, Ph.D., Lecturer on Legal Medicine in the Department of Pathology.

Walter G. J. Putschar, M.D., Lecturer on Pathology.

Stanley L. Robbins, M.D., Lecturer on Pathology.

Andrew S. Abraham, M.D., Research Associate in Pathology.

Eleanor C. Adams, A.B., Research Associate in Pathology.

Richard A. Adams, Ph.D., Research Associate in Pathology.

Rogelio Alarcon, M.D., Research Associate in Pathology.
Mayo E. Brown, Ph.D., Research Associate in Pathology.
John A. Cavins, M.D., Research Associate in Pathology.
Samuel S. Epstein, M.D., Research Associate in Pathology.
Awtar K. Ganju, Ph.D., Research Associate in Pathology.
Lippman H. Geronimus, Ph.D., Research Associate in Pathology.
Morris N. Green, Ph.D., Research Associate in Pathology.
Masando Hayashi, M.D., Ph.D., Research Associate in Pathology.
Ronald D. Hunt, D.V.M., Research Associate in Pathology.
Lorna D. Johnson, M.D., Research Associate in Pathology.
Saul Malkiel, Ph.D., M.D., Research Associate in Pathology.
Robert E. McCarthy, Ph.D., Research Associate in Pathology.
Edward J. Modest, Ph.D., Research Associate in Pathology.
DeWayne Roberts, Ph.D., Research Associate in Pathology.
Howard S. Rubenstein, M.D., Research Associate in Pathology.
Barbara H. Sanford, Ph.D., Research Associate in Pathology.
Henry S. Slayter, Ph.D., Research Associate in Pathology.
Betty B. G. Uzman, M.D., Research Associate in Pathology.
Tien-Wen Tao Wiedmann, Ph.D., Research Associate in Pathology.
George Yerganian, Ph.D., Research Associate in Pathology.
Nolton H. Bigelow, M.D., Instructor in Pathology.
Harry W. Carter, M.D., Instructor in Pathology.
Roger A. Cote, M.D., Instructor in Pathology.
Charles J. De Wan, M.D., Instructor in Pathology.
Jules Edlow, M.D., Instructor in Pathology.
Donald Feldman, M.D., Instructor in Pathology.
Edward O. Fox, M.D., Instructor in Pathology.
Charles E. Gilmore, D.V.M., Instructor in Pathology.
Harvey Goldman, M.D., Instructor in Pathology.
Joseph S. Incze, M.D., Instructor in Pathology.
Hubert Jockin, M.D., Instructor in Pathology.
Charles S. Kahn, M.D., Instructor in Pathology.
Irwin K. Kline, M.D., Instructor in Pathology.
Tilde S. Kline, M.D., Instructor in Pathology.
George Kury, M.D., Instructor in Pathology.

Olga C. Leary, M.D., Instructor in Pathology.
Richard R. Lindquist, M.D., Instructor in Pathology (resigned January 15, 1967).
Joseph C. Merriam, Jr., M.D., Instructor in Pathology.
Pen-ming L. Ming, M.D., Instructor in Pathology.
Miriam Moldveen (Geronimus), M.D., Instructor in Pathology.
Arthur E. O'Dea, M.D., Instructor in Pathology.
John A. Peters, M.D., Instructor in Pathology.
Charles R. Robinson, M.B., Ch.B., Instructor in Pathology.
Russell B. Street, Jr., M.D., Instructor in Pathology.
Joe Suyemoto, M.D., Instructor in Pathology.
Carol J. Amick, M.D., Assistant in Pathology.
Albert E. Anderson, M.D., Assistant in Pathology.
George K. Baer, M.D., Assistant in Pathology.
Glenda W. Brodkey, M.D., Assistant in Pathology.
George R. Dickersin, M.D., Assistant in Pathology.
Arthur W. Duff, M.D., Assistant in Pathology.
George W. Evans, M.D., Assistant in Pathology.
James M. Gibson, M.D., Assistant in Pathology (from October 1, 1966).
Jacob Goldstein, Ph.D., Assistant in Pathology.
Robert S. Harper, M.D., Assistant in Pathology.
Carl A. Harris, Ph.D., M.D., Assistant in Pathology.
Isao Katayama, M.D., Ph.D., Assistant in Pathology.
David H. Kessel, Ph.D., Assistant in Pathology.
Robert M. Lewis, D.V.M., Assistant in Pathology.
Kenneth W. Lieberman, Ph.D., Assistant in Pathology (from September 1, 1966).
Kilmer S. McCully, M.D., Assistant in Pathology.
William F. O'Toole, M.D., Assistant in Pathology.
Jane F. Pascale, M.D., Assistant in Pathology (from October 1, 1966).
Livia H. Rev-Kury, M.D., Assistant in Pathology.
Monira K. Rifaat, M.B., Ch.B., Assistant in Pathology.
Adrianne E. Rogers, M.D., Assistant in Pathology.
Luke G. Tedeschi, M.D., Assistant in Pathology.

Bernard C. Zook, D.V.M., Assistant in Pathology.
Arlene O. Bensam, Ph.D., Research Fellow in Pathology.
Norval W. King, Jr., D.V.M., Research Fellow in Pathology.
Kaethe Kretschmer, M.D., Research Fellow in Pathology.
Charles T. Ladoulis, M.D., Research Fellow in Pathology.
Irwin Leav, D.V.M., Research Fellow in Pathology.
James C. Murphy, D.V.M., Ph.D., Research Fellow in Pathology.
Herbert T. Norris, M.D., Research Fellow in Pathology.
Yumiko Ohta, Ph.D., Research Fellow in Pathology (from September 15, 1966).
David S. Papermaster, M.D., Research Fellow in Pathology.
Leamon T. Pulley, D.V.M., Research Fellow in Pathology.
Rodney L. Robison, D.V.M., Research Fellow in Pathology (from October 1, 1966).
Eveline E. Schneeberger, M.D., Research Fellow in Pathology.
Harry R. Schumacher, M.D., Research Fellow in Pathology.
Simon J. Simonian, M.B., B.S., Research Fellow in Pathology.
Jerome H. Smith, M.D., Research Fellow in Pathology.
Kurt S. Stenn, M.D., Research Fellow in Pathology.
Yves J. Van Schoote, M.D., Research Fellow in Pathology (from September 1, 1966).
Frederick W. Bauer, M.D., Teaching Fellow in Pathology.
George J. Busch, M.D., Teaching Fellow in Pathology.
Jean E. Carter, M.D., Teaching Fellow in Pathology.
James J. Daly, M.B., Ch.B., Teaching Fellow in Pathology.
Ronald A. DeLellis, M.D., Teaching Fellow in Pathology.
Jean Duquella, M.D., Teaching Fellow in Pathology.
Hilary Evans, M.D., Teaching Fellow in Pathology (resigned December 31, 1966).
John L. Farber, M.D., Teaching Fellow in Pathology.
Charles G. Huizenga, M.D., Teaching Fellow in Pathology.
Richard A. Jaqua, M.D., Teaching Fellow in Pathology.
Houchidar C. Maneche, M.D., Teaching Fellow in Pathology.
Gerald Nash, M.D., Teaching Fellow in Pathology.
Takashi Okagaki, M.D., Teaching Fellow in Pathology.
Daniel G. Sheahan, M.B., Ch.B., Teaching Fellow in Pathology.

Peter J. Tegtmeyer, M.D., Teaching Fellow in Pathology.
Robert L. Trelstad, M.D., Teaching Fellow in Pathology.
Joel Umilas, M.D., Teaching Fellow in Pathology.
Ronald S. Weinstein, M.D., Teaching Fellow in Pathology.
Dinah T. Yu, M.B., Teaching Fellow in Pathology.

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Affiliated:

John C. Snyder, M.D., Professor of Public Health Bacteriology, and Dean of the School of Public Health.

Paul Goldhaber, D.D.S., Associate Professor of Periodontology, and Tutor in Dental Science.

Edward H. Kass, M.D., Ph.D., Associate Professor of Bacteriology and Immunology.

Taylor R. Smith, M.D., Assistant Clinical Professor of Ophthalmology.

Carolyn Cohen, Ph.D., Lecturer on Biophysics at The Children's Hospital.

Lewis T. Mann, Jr., Lecturer on Biological Chemistry.

Shou-Cheng J. Fu, Ph.D., Research Associate in Biological Chemistry.

Mervyn Israel, Ph.D., Research Associate in Biological Chemistry.

## *Required Course*

Pathology A. *Second Year.* — The second year course in pathology is planned as a systematic survey of pathology. It consists of lectures, laboratory study of pathologic histology and demonstrations of gross pathologic material, partly as fixed specimens, but more extensively as demonstrations of fresh autopsy and surgical material brought from the laboratories of the affiliated hospitals. Students visit the Pathology Laboratories of the Boston City Hospital, Massachusetts General Hospital, Peter Bent Brigham Hospital, Children's Hospital, Beth Israel Hospital, New England Deaconess Hospital, Boston Hospital for Women, and the South Huntington Avenue Veterans Hospital, for participation in performance of autopsies.

Lectures are given three days in the week by the staff. The course is divided roughly, though not sharply, into general and special pathology, covering in the first part of the year basic pathologic

processes, such as tissue injury and repair, inflammation, tissue responses to specific infectious agents and neoplasia. Special pathology is integrated with the other second year courses and designated as Pathologic Physiology. Eight organs or systems will be thus considered during the present academic year: hematopoietic system, kidney, cardiovascular system, respiratory system, gastrointestinal system, endocrine-reproductive system, musculoskeletal, and nervous system. The pathology of the eye and oral cavity are covered in collaboration with other departments of the University.

Courses in parasitology and neuropathology are given separately by the Department of Tropical Public Health of the Harvard School of Public Health and the Department of Neurology respectively. Neuropathology is, however, one of the component parts of the multi-departmental course, Pathologic Physiology.

| SECOND YEAR | HOURS |
|---|---|
| Lectures. Dr. Hertig and Associates. | |
| Laboratory work. Dr. Hertig and Associates. | 350† |

† This figure includes Parasitology and Neuropathology.

## *Fourth Year Elective Courses* *

BLOCK COURSES

501. Advanced Pathology. Dr. Dammin.
502. Gynecologic Pathology. Dr. J. M. Craig.
503. Fetal and Obstetrical Pathology. Dr. J. M. Craig.
504. Advanced Pathology. Drs. Cotran and Gottlieb.
505. Advanced Pathology. Drs. Castleman and E. B. Taft.
506. Advanced Pathology. Drs. Castleman and E. B. Taft.
507. Advanced Pathology. Dr. Freiman.
508. Advanced Pathology. Dr. Farber.
509. Pathology of Tumors. Dr. Meissner.
510. Pathology of Endocrine Diseases. Dr. Meissner.
511M. Pathology of Skin — Clinical and Microscopic Correlations. Drs. Fitzpatrick and W. Clark. (*Same course as Dermatology 503M.*)
512M. Clinical Liver Disease and Gastroenterology. Drs. Davidson, Zamcheck and Associates. (*Same course as Medicine 514M.*)
513M. Advanced Study in Neuropathology. Dr. Romanul. (*Same course as Neurology 502M.*)
514M. Advanced Study in Neuropathology. Dr. E. P. Richardson. (*Same course as Neurology 509M.*)

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

BLOCK COURSES — RESEARCH

801. Research in Pathology (a): Laboratory Aspects. Dr. DAMMIN.
802. Research in Pathology (b): Clinico-Pathologic Aspects. Dr. DAMMIN.
803. Experimental Research Oriented to Problems of Neoplasia. Dr. LISCO.
804. Research in Special Areas. Dr. FARBER and ASSOCIATES.
805. Research in Pathology. Drs. CASTLEMAN and E. B. TAFT.
806. Pathophysiology of Liver and Gastrointestinal Diseases. Drs. DAVIDSON, MCDERMOTT, ZAMCHECK, and ASSOCIATES. (*Same course as Medicine 816 and Surgery 815.*)
807. Gastronintestinal Disease II. Dr. ZAMCHECK and ASSOCIATES. (*Same course as Medicine 539.*)

LONGITUDINAL COURSE

701. Neoplasms of Melanocytes and Related Problems in Cutaneous Pathology. Dr. W. CLARK. (*Same course as Dermatology 704.*)

## DIVISION OF LEGAL MEDICINE — DEPARTMENT OF PATHOLOGY

LEONARD ATKINS, M.D., Assistant Clinical Professor of Pathology, and Acting Head of the Division of Legal Medicine of the Department of Pathology.

GEORGE W. CURTIS, M.D., Assistant Clinical Professor of Pathology.

CONSTANTINE J. MALETSKOS, PH.D., Lecturer on Legal Medicine in the Department of Pathology.

ARTHUR J. MCBAY, PH.D., Lecturer on Legal Medicine in the Department of Pathology.

NOLTON H. BIGELOW, M.D., Instructor in Pathology.

ARTHUR W. DUFF, M.D., Assistant in Pathology.

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Affiliated:

JACK R. EWALT, M.D., A.M. (hon.), Bullard Professor of Psychiatry.

### *Required Course*

*Principal Clinical Year.* — Fourteen lectures. The relationship of the physician to organized society. Laws and legal principles re-

lating to the practice of medicine. Medical evidence and its relation to the administration of justice. Principles of forensic pathology and toxicology. Lectures.

| PRINCIPAL CLINICAL YEAR | HOURS |
|---|---|
| Lectures. Dr. Atkins and Associates. H.M.S. Fourteen Wednesday afternoons, at 4.15 P.M. | 14 |

## Department of Pediatrics

Charles A. Janeway, M.D., A.M. (hon.), M.D. (hon.), Thomas Morgan Rotch Professor of Pediatrics, and Head of the Department at The Children's Hospital.

Nathan B. Talbot, M.D., Charles Wilder Professor of Pediatrics, and Head of the Department at the Massachusetts General Hospital.

William Berenberg, M.D., Clinical Professor of Pediatrics.

Louis K. Diamond, M.D., Professor of Pediatrics at The Children's Hospital (on sabbatical leave from September 1, 1966 through August 31, 1967).

James R. Gallagher, M.D., Clinical Professor of Pediatrics.

Alexander S. Nadas, M.D., Clinical Professor of Pediatrics.

Harry Shwachman, M.D., Clinical Professor of Pediatrics.

Clement A. Smith, M.D., A.M. (hon.), M.D. (hon.), Professor of Pediatrics at the Boston Hospital For Women (Lying-in Division), and Chairman of the Executive Committee of the Departments of Pediatrics.

Stewart H. Clifford, M.D., Associate Clinical Professor of Pediatrics.

John D. Crawford, M.D., Associate Professor of Pediatrics at the Massachusetts General Hospital.

Park S. Gerald, M.D., Associate Professor of Pediatrics at The Children's Hospital.

DeWitt C. Baldwin, Jr., M.D., Assistant Professor of Pediatrics at the Forsyth Dental Infirmary for Children.

Robert B. Berg, M.D., Assistant Professor of Pediatrics at the Beth Israel Hospital.

John F. Crigler, Jr., M.D., Assistant Professor of Pediatrics at The Children's Hospital.

Allen C. Crocker, M.D., Assistant Clinical Professor of Pediatrics, and Tutor in Medical Science.

Francis X. Fellers, M.D., Assistant Professor of Pediatrics at The Children's Hospital.

Donald C. Fyler, M.D., Assistant Clinical Professor of Pediatrics (from October 1, 1966).

Paul G. Hugenholtz, M.D., Assistant Professor of Pediatrics at The Children's Hospital.

Samuel L. Katz, M.D., Assistant Professor of Pediatrics at The Children's Hospital.

John W. Littlefield, M.D., Assistant Professor of Pediatrics at the Massachusetts General Hospital.

R. Grier Monroe, M.D., Assistant Professor of Pediatrics at The Children's Hospital.

David G. Nathan, M.D., Assistant Professor of Pediatrics at The Children's Hospital.

Fred S. Rosen, M.D., Assistant Professor of Pediatrics at The Children's Hospital, and Tutor in Medical Science.

Ralph A. Ross, M.D., Assistant Clinical Professor of Pediatrics.

John Kosa, Ph.D., Lecturer on Sociology in the Department of Pediatrics.

Benedict F. Massell, M.D., Lecturer on Pediatrics.

Joel J. Alpert, M.D., Associate in Pediatrics.

Thomas B. Brazelton, M.D., Clinical Associate in Pediatrics.

Leo B. Burgin, M.D., Clinical Associate in Pediatrics.

John P. Connelly, M.D., Associate in Pediatrics.

James E. Drorbaugh, M.D., Clinical Associate in Pediatrics.

Richard B. Kearsley, M.D., Associate in Pediatrics (on leave July 1, 1966 through June 30, 1967).

Sherwin V. Kevy, M.D., Clinical Associate in Pediatrics.

Jerome O. Klein, M.D., Associate in Pediatrics.

Robert P. Masland, Jr., M.D., Clinical Associate in Pediatrics.

Anna T. Mitus, M.D., Clinical Associate in Pediatrics.

Harry L. Mueller, M.D., Clinical Associate in Pediatrics.

Nicholas M. Nelson, M.D., Associate in Pediatrics at the Boston Hospital for Women (Lying-in Division), and Tutor in Medical Science.

Philip J. Porter, M.D., Clinical Associate in Pediatrics.

David H. Smith, M.D., Associate in Pediatrics, and Tutor in Pediatrics.

William D. Winter, Jr., M.D., Clinical Associate in Pediatrics.
Sydney S. Gellis, M.D., Lecturer on Pediatrics.
Robert Klein, M.D., Lecturer on Pediatrics.
Louis Weinstein, Ph.D., M.D., Lecturer on Infectious Diseases.
Irena Antonowicz, Ph.D., Research Associate in Pediatrics.
Lakshmi Das, M.B., B.S., Research Associate in Pediatrics.
Clementine F. Geiser, M.D., Research Associate in Pediatrics.
Norman I. Gold, Ph.D., Research Associate in Biological Chemistry in the Department of Pediatrics.
Mitsuko T. Laforet, M.D., Research Associate in Pediatrics.
Miriam D. Manning, M.D., Research Associate in Pediatrics.
Marshall Melin, Ph.D., Research Associate in Pediatrics.
Jacob G. Michael, Ph.D., Research Associate in Bacteriology and Immunology in the Department of Pediatrics (resigned September 26, 1966).
William I. Neikirk, M.D., Research Associate in Pediatrics (resigned September 30, 1966).
Harald Orjasaeter, M.D., Research Associate in Pediatrics (through January 31, 1967).
Leon S. Robertson, Ph.D., Research Associate in Sociology in the Department of Pediatrics (from August 1, 1966).
Dorothy B. Villee, M.D., Research Associate in Pediatrics.
Thomas W. Adams, M.D., Instructor in Pediatrics.
Olga E. Allers, M.D., Instructor in Pediatrics.
Irving W. Bailit, M.D., Instructor in Pediatrics.
Euan T. Blanch, M.D., Instructor in Pediatrics.
Gerald E. Bloom, M.D., Instructor in Pediatrics.
Nancy H. Bright, M.D., Instructor in Pediatrics.
John K. Brines, M.D., Instructor in Pediatrics.
Josiah W. Brown, M.D., Instructor in Pediatrics.
James J. A. Cavanaugh, M.D., Instructor in Pediatrics.
William D. Cochran, M.D., Instructor in Pediatrics.
Albert Cohen, M.D., Instructor in Pediatrics.
Karel J. de Haas, M.D., Instructor in Pediatrics.
William A. Dickson, M.D., Instructor in Pediatrics.
William R. Dorsey, M.D., C.M., Instructor in Pediatrics.

Edward C. Dyer, M.D., Instructor in Pediatrics.
LeRoy L. Eldredge, Jr., M.D., Instructor in Pediatrics.
Lawrence J. Essember, M.D., Instructor in Pediatrics.
Nathan H. Fearer, M.D., Instructor in Pediatrics.
Joseph N. Fisher, Jr., M.D., Instructor in Pediatrics.
Joseph W. Fowler, M.D., Instructor in Pediatrics.
Albert A. Frank, M.D., Instructor in Pediatrics.
Walter J. Gamble, M.D., Instructor in Pediatrics.
Warren M. Gold, M.D., Instructor in Pediatrics, and Tutor in Medical Science.
Allan Goldblatt, M.D., Instructor in Pediatrics.
Jordan B. Greenfield, M.D., Instructor in Pediatrics.
Herbert A. Haessler, M.D., Instructor in Pediatrics.
Sprague W. Hazard, M.D., Instructor in Pediatrics.
Margaret C. Heagarty, M.D., Instructor in Pediatrics.
John P. Hubbell, Jr., M.D., Instructor in Pediatrics.
David Ingall, M.D., Instructor in Pediatrics.
John B. Joseph, M.D., Instructor in Pediatrics.
Joseph L. Kennedy, Jr., M.D., Instructor in Pediatrics.
Kon T. Khaw, M.D., Instructor in Pediatrics.
Martin R. Klemperer, M.D., Instructor in Pediatrics.
Christopher G. C. LaFarge, M.D., Instructor in Pediatrics.
David J Lang, M.D., Instructor in Pediatrics, and Tutor in Medical Science.
Alexander S. MacDonald, Jr., M.D., Instructor in Pediatrics.
Francis C. McDonald, M.D., Instructor in Pediatrics.
Joseph J. McGovern, M.D., Instructor in Pediatrics.
Otto S. Nau, Jr., M.D., Instructor in Pediatrics.
Julian L. Pearlman, M.D., Instructor in Pediatrics.
Thomas C. Peebles, M.D., Instructor in Pediatrics.
Veronica S. Petersen, M.D., Instructor in Pediatrics.
William Pfeffer, Jr., M.D., Instructor in Pediatrics.
William H. Plauth, Jr., M.D., Instructor in Pediatrics.
Daniel R. Rectanus, M.D., Instructor in Pediatrics.
Gertrud C. Reyersbach, M.D., Instructor in Pediatrics.
Robert H. Richie, Jr., M.D., Instructor in Pediatrics.

John S. Robey, M.D., Instructor in Pediatrics.
Oliver F. Roddey, Jr., M.D., Instructor in Pediatrics.
Jordan S. Ruboy, M.D., Instructor in Pediatrics.
Robert T. Sceery, M.D., Instructor in Pediatrics.
Edward M. Sears, M.D., Instructor in Pediatrics.
Gerald B. Shattuck, M.D., Instructor in Pediatrics.
S. Norman Sherry, M.D., Instructor in Pediatrics.
Irving Silverman, M.D., Instructor in Pediatrics.
Lendon Snedeker, M.D., Instructor in Pediatrics.
Lester F. Soyka, M.D., Instructor in Pediatrics.
Allan B. Stimson, M.D., Instructor in Pediatrics.
Herbert S. Strauss, M.D., Instructor in Pediatrics.
Harry B. Stults, Jr., M.D., Instructor in Pediatrics.
George H. Taft, M.D., Instructor in Pediatrics.
Rudolf Toch, M.D., Instructor in Pediatrics.
William J. Turtle, M.D., Instructor in Pediatrics.
John W. G. Tuthill, M.D., Instructor in Pediatrics.
Irving Umansky, M.D., Instructor in Pediatrics.
Wilhelmina M. Van Dyke, M.D., Instructor in Pediatrics.
Willem vanPelt, M.D., Instructor in Pediatrics.
Stella Z. vanPraagh, M.D., Instructor in Pediatrics.
Jacob Wallace, M.D., Instructor in Pediatrics.
Richard H. Watson, M.D., Instructor in Pediatrics.
Mary E. B. Wohl, M.D., Instructor in Pediatrics.
Eleonore C. Zaudy, M.D., Instructor in Pediatrics.
Alla G. Zaver, M.B., B.S., Instructor in Pediatrics.
William J. Adelson, M.D., Assistant in Pediatrics.
Donald J. Annino, M.D., Assistant in Pediatrics.
Kelley K. Davis, M.D., Assistant in Pediatrics.
Paul F. Donahue, M.D., Assistant in Pediatrics.
Ralph Earle, Jr., M.D., Assistant in Pediatrics.
Arnold D. Fiascone, M.D., Assistant in Pediatrics.
Morton J. Franklin, M.D., Assistant in Pediatrics.
Garabed H. Garabedian, M.D., Assistant in Pediatrics.
George M. Gill, M.D., Assistant in Pediatrics.
George A. Glines, M.D., Assistant in Pediatrics.

Elizabeth A. Gregory, M.D., Assistant in Pediatrics.
Andrew D. Guthrie, Jr., M.D., Assistant in Pediatrics.
Gerald W. Hazard, M.D., Assistant in Pediatrics.
Richard A. Katz, M.D., Assistant in Pediatrics.
Maurice E. Keenan, M.D., Assistant in Pediatrics.
Howard S. King, M.D., Assistant in Pediatrics.
Leon E. Kruger, M.D., Assistant in Pediatrics.
Rosemary C. Leake, M.D., Assistant in Pediatrics.
H. Lester Medlinsky, M.D., Assistant in Pediatrics.
Myron Morris, Ph.D., M.D., Assistant in Pediatrics.
Lawrence S. Morse, M.D., Assistant in Pediatrics.
Donald M. Muirhead, Jr., M.D., Assistant in Pediatrics.
Alice C. Nauen, M.D., Assistant in Pediatrics.
Cathleen C. O'Brien, M.D., Assistant in Pediatrics.
Robert J. Orme, M.D., Assistant in Pediatrics.
Joseph Osborne, M.D., Assistant in Pediatrics.
Eileen M. Ouellette, M.D., Assistant in Pediatrics.
Howard J. Potter, M.D., Assistant in Pediatrics.
Julius Rako, M.D., Assistant in Pediatrics.
Stephan L. Reynolds, M.D., Assistant in Pediatrics.
George L. Robb, M.D., Assistant in Pediatrics.
Murray K. Rosenthal, M.D., Assistant in Pediatrics.
Daniel C. Shannon, M.D., Assistant in Pediatrics.
George L. Siegel, A.B., Assistant in Pediatrics.
Leslie Silverstone, M.D., D.P.H., Assistant in Pediatrics.
George Storm, M.D., Assistant in Pediatrics.
John S. Taub, M.D., Assistant in Pediatrics.
Harold J. Wheeler, M.D., Assistant in Pediatrics.
Martin K. White, M.D., Assistant in Pediatrics.
Thomas J. Whitfield, 3rd., M.D., Assistant in Pediatrics.
Alan Ziskind, M.D., Assistant in Pediatrics.
William H. Albers, M.D., Research Fellow in Pediatrics.
Theodore W. AvRuskin, M.D., Research Fellow in Pediatrics.
Robert L. Baehner, M.D., Research Fellow in Pediatrics.
Christos S. Bartsocas, M.D., Research Fellow in Pediatrics.
Richard S. Baum, M.D., Research Fellow in Pediatrics.

## PEDIATRICS

Hans H. Bode, M.D., Research Fellow in Pediatrics.

Frederick P. A. Capps, M.B., B.S., Research Fellow in Pediatrics (through August 31, 1966).

Joan D. Crain, M.D., Research Fellow in Pediatrics.

Maria L. Dufau, M.D., Research Fellow in Pediatrics.

Amy Edalji, M.B., B.S., Research Fellow in Pediatrics.

Robert C. Ellison, M.D., Research Fellow in Pediatrics.

Richard I. Feinbloom, M.D., Research Fellow in Pediatrics.

Enrique M. Galan, M.D., Research Fellow in Pediatrics (through December 31, 1966).

Mary C. Goodchild, M.B., B.S., Research Fellow in Pediatrics.

Ronald J. Heller, M.D., Research Fellow in Pediatrics.

Douglas S. Holsclaw, Jr., M.D., Research Fellow in Pediatrics (from September 15, 1966).

Stanley D. Johnson, M.D., Research Fellow in Pediatrics.

Elvin Kaplan, M.D., Research Fellow in Pediatrics.

Margaret Kemball, M.B., B.S., Research Fellow in Pediatrics (through October 31, 1966).

Shuzo Matsumoto, M.D., Research Fellow in Pediatrics.

Leone F. Mattioli, M.D., Research Fellow in Pediatrics.

John M. Neff, M.D., Research Fellow in Pediatrics.

Christopher H. Nourse, M.B., Ch.B., Research Fellow in Pediatrics (through September 30, 1966.

Vilma Piedrahita, M.D., Research Fellow in Pediatrics.

I. Barry Pless, M.D., Research Fellow in Pediatrics.

Albert C. Price, M.D., Research Fellow in Pediatrics.

Betty L. Priestley, M.B., B.S., Research Fellow in Pediatrics.

Bruce M. Rosenberg, M.D., Research Fellow in Pediatrics.

Ammon Rosenthal, M.D., Research Fellow in Pediatrics.

Ellen F. Runge, M.D., Research Fellow in Pediatrics (from September 1, 1966).

Anne-Marie Schindler, M.D., Research Fellow in Pediatrics.

Elias Schwartz, M.D., Research Fellow in Pediatrics.

Myron Siner, M.B., Ch.B., Research Fellow in Pediatrics.

Albert W. Sparrow, M.D., Research Fellow in Pediatrics.

Charles E. Teebagy, M.D., Research Fellow in Pediatrics.

James R. Tiernan, M.B., B.S., Research Fellow in Pediatrics (through March 31, 1967).
Henry R. Wagner, M.D., Research in Pediatrics.
Wladimir Wertelecki, M.D., Research Fellow in Pediatrics.
Catherine M. Wilfert, M.D., Research Fellow in Pediatrics.
Harold S. Zarkowsky, M.D., Research Fellow in Pediatrics.
John P. Anderson, M.D., Teaching Fellow in Pediatrics.
Charles S. August, M.D., Teaching Fellow in Pediatrics.
Cheston M. Berlin, Jr., M.D., Teaching Fellow in Pediatrics.
Gregory R. Bonomo, M.D., Teaching Fellow in Pediatrics.
Andrew G. Glass, M.D., Teaching Fellow in Pediatrics.
Richard J. Grand, M.D., Teaching Fellow in Pediatrics.
Robert A. Greenberg, M.D., Teaching Fellow in Pediatrics.
Thorlakur S. Halldorsson, M.D., Teaching Fellow in Pediatrics.
William B. Henry, M.D., Teaching Fellow in Pediatrics.
Alan H. Nauss, M.D., Teaching Fellow in Pediatrics.
Marshall L. Reiner, Jr., M.D., Teaching Fellow in Pediatrics.
John C. Robinson, M.D., Teaching Fellow in Pediatrics.
Nathan P. Strause, 3d, M.D., Teaching Fellow in Pediatrics.
Stephen F. Wang, M.D., Teaching Fellow in Pediatrics.

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Affiliated:

Charles F. Barlow, M.D., Bronson Crothers Professor of Neurology and Head of the Department at The Children's Hospital.
Sidney Farber, M.D., Professor of Pathology at The Children's Hospital.
George E. Gardner, M.D., Professor of Psychiatry at The Children's Hospital.
Edward B. D. Neuhauser, M.D., Clinical Professor of Radiology.
William M. Schmidt, M.D., Professor of Maternal and Child Health, S.P.H.
Thomas H. Weller, M.D., Richard Pearson Strong Professor of Tropical Public Health, S.P.H.
Philip R. Dodge, M.D., Assistant Professor of Neurology at the Massachusetts General Hospital.

Janet W. McArthur, M.D., Associate Clinical Professor of Medicine.

Morton N. Swartz, M.D., Assistant Professor of Medicine at the Massachusetts General Hospital.

Peter H. Wolff, M.D., Assistant Professor of Psychiatry at The Children's Hospital.

Ezio Merler, Ph.D., Research Associate in Biological Chemistry.

Tully Benaron, M.D., Instructor in Psychiatry.

Dexter M. Bullard, Jr., M.D., Instructor in Psychiatry.

Richard Galdston, M.D., Instructor in Psychiatry.

Richmond Holder, M.D., Instructor in Psychiatry.

John H. Lamont, M.D., Instructor in Psychiatry.

Mary L. L. Scholl, M.D., Instructor in Neurology.

## *Required Courses*

Pediatrics. *Second Year.* — During appropriate sections of the period devoted to correlative teaching in the second semester, pediatric lectures are given on adjustments of respiration, renal regulation, digestion and metabolism, and endocrinology, in early life. Participation by members of the Department of Pediatrics in laboratory and demonstration exercises devoted to these and other body systems further introduces concepts of growth and development into the study of morphology and function in this period.

Pediatrics. *Introduction to the Clinic.* — The student is taught the special aspects of infants and children as patients by those Department members attached to the hospital to which he is assigned for the course in Introduction to the Clinic.

Pediatrics. *Principal Clinical Year.* — Pediatrics is taught intensively to one-eighth of the class at a time for six weeks at either The Children's Hospital Medical Center or the Massachusetts General Hospital. Insofar as possible, students "introduced to the clinic" at one hospital will be assigned for this six weeks of pediatrics to another. By classroom demonstrations and, especially, by working in small supervised sections in the wards and outpatient clinics, students learn by participation the prevention, diagnosis, and treatment of disease in infants and children, and the care of the well child.

SECOND YEAR — HOURS

Clinical lectures. C.H.M.C. Second half year — 4

INTRODUCTION TO THE CLINIC

Clinical Instruction.

PRINCIPAL CLINICAL YEAR

Clinical Clerkship. C.H.M.C., M.G.H. — 240

## *Fourth Year Elective Courses* *

BLOCK COURSES

501M. General Pediatrics — Wards. Drs. Janeway, Diamond, and Berenberg.
502M. General Pediatrics — Ambulatory Services. Dr. Cone.
503M. Pediatric Practice in a Rural Area. Dr. R. Berg.
504M. Family Health Care Program — Short Course. Dr. Alpert and Associates.
506M. Medical Care of Adolescents. Dr. J. R. Gallagher and Associates.
507M. Cardiology. Dr. Nadas and Associates.
508M. Endocrinology and Metabolism I. Dr. Crigler and Associates.
509M. Clinical Genetics. Dr. Gerald and Associates.
510M. Hematology I. Dr. Diamond and Associates.
511M. Neonatal Pediatrics. Dr. C. A. Smith and Associates.
512M. Neoplastic Diseases. Dr. Farber and Associates.
513M. Clinical Nutrition. Dr. Shwachman and Associates.
514M. Diseases of Protein Metabolism and Immunologic Responses. Dr. F. S. Rosen and Associates.
515M. Renal Metabolism. Dr. Fellers and Associates.
516M. Rheumatic Fever and Rheumatic Heart Disease. Drs. Massell, Michael, and Associates.
517M. Pediatric Neurology. Dr. C. F. Barlow. (*Same course as Neurology 503M.*)
518M. General Pediatrics. Dr. Talbot.
519M. Metabolism and Endocrinology. Dr. Crawford.
520M. Behavioral Aspects of Pediatric Medicine. Dr. Kearsley and Associates.
521M. Ambulatory Pediatrics. Dr. Connelly.
522M. Pediatric Neurology I. Dr. Dodge. (*Same course as Neurology 506M.*)
523M. Pediatric Neurology II. Dr. Dodge. (*Same course as Neurology 507M.*)

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

## PEDIATRICS

524M. Pediatric Neurology. Dr. Moser. (*Same course as Neurology 508M.*)
525M. Pediatric Surgery. Dr. Hendren. (*Same course as Surgery 513M.*)
526M. Infectious Disease. Dr. L. Weinstein.
527M. Children's Surgery. Dr. Gross and Associates. (*Same course as Surgery 502M.*)

### BLOCK COURSES — RESEARCH

801. Endocrinology and Metabolism II. Dr. Crigler and Associates.
802. Hematology II. Dr. Diamond and Associates.
803. Infectious Diseases. Dr. S. Katz and Associates.

### LONGITUDINAL COURSES

701. Pediatric Urologic Problems. Dr. Perlmutter. (*Same course as Surgery 704.*)
702M. Family Health Care Program. Drs. Alpert, Bullard, Sidel, Robbins, and Associates. (*Also listed in Interdepartmental Section.*)
703. Medical Sociology. Dr. Kosa and Associates.

## Department of Pharmacology

Otto Krayer, M.D., A.M. (hon.), M.D. (hon.), Gustavus Adolphus Pfeiffer Professor of Pharmacology, and Head of the Department (retired August 31, 1966).

Ullrich G. Trendelenburg, M.D., Ph.D., A.M. (hon.), Associate Professor of Pharmacology, and Acting Head of the Department (from September 1, 1966).

Arnold S. V. Burgen, M.B., B.S., M.D., Visiting Professor of Pharmacology (from August 1, 1966 through September 30, 1966).

John R. Blinks, M.D., Assistant Professor of Pharmacology.

Werner E. Flacke, M.D., Assistant Professor of Pharmacology.

Oleg Jardetzky, M.D., Ph.D., Assistant Professor of Pharmacology (resigned January 31, 1967).

Roger T. Kelleher, Ph.D., Assistant Professor of Pharmacology.

Jan Koch-Weser, M.D., Assistant Professor of Pharmacology.

Martin Lubin, M.D., Ph.D., Assistant Professor of Pharmacology (on leave September 1, 1966 through June 30, 1967).

William H. Morse, Ph.D., Assistant Professor of Psychology in the Department of Pharmacology.

Hugues J. P. Ryser, M.D., Assistant Professor of Pharmacology.

Armen H. Tashjian, Jr., M.D., Assistant Professor of Pharmacology in the School of Dental Medicine.

Frederick C. Uhle, Ph.D., Assistant Professor of Chemistry in the Department of Pharmacology (through August 31, 1966).

Douglas R. Waud, M.D., D.Phil., Assistant Professor of Pharmacology.

Norman Weiner, M.D., Assistant Professor of Pharmacology.

Paul R. Draskoczy, M.D., Associate in Pharmacology

Lincoln T. Potter, M.D., Associate in Pharmacology (on leave July 1, 1966 through June 30, 1967).

Geoffrey W. G. Sharp, Ph.D., Associate in Pharmacology at the Massachusetts General Hospital.

Paul L. Munson, Ph.D., A.M. (hon.), Lecturer on Pharmacology in the School of Dental Medicine (through August 31, 1966).

Jane Y. C. Chen, B.S., Research Associate in Neurophysiology and Neuropharmacology (resigned July 31, 1966).

Peter Ofner, Ph.D., Research Associate in Pharmacology in the School of Dental Medicine.

Marcus B. Waller, Ph.D., Research Associate in Pharmacology (through July 31, 1966).

Richard A. Gillis, Ph.D., Instructor in Pharmacology.

Salomon Z. Langer, M.D., Instructor in Pharmacology (resigned September 30, 1966).

Camille B. Olson, Ph.D., Instructor in Pharmacology.

Robert T. Anselmi, Ph.D., Research Fellow in Pharmacology (through August 31, 1966).

Anne Clark, Ph.D., Research Fellow in Pharmacology (from August 15, 1966).

Jack S. Cohen, Ph.D., Research Fellow in Pharmacology (from October 1, 1966 through December 31, 1966).

Gordon L. Coppoc, D.V.M., Research Fellow in Pharmacology (through August 31, 1966).

Marie-Pierre I. Gabathuler, M.S., Research Fellow in Pharmacology.

Joseph M. Garfield, M.D., Research Fellow in Pharmacology.

Leslie L. Iversen, Ph.D., Research Fellow in Neurophysiology and Neuropharmacology (through August 31, 1966).

Susan D. Iversen, Ph.D., Research Fellow in Pharmacology (resigned August 31, 1966).

Albert J. Kaumann, M.D., Research Fellow in Pharmacology (from September 15, 1966).

Fu-li Lee, M.D., Research Fellow in Pharmacology (through July 31, 1966).

James W. McKearney, Ph.D., Research Fellow in Pharmacology (from December 1, 1966).

Donald E. McMillan, Ph.D., Research Fellow in Pharmacology (resigned August 31, 1966).

James C. Metcalfe, Ph.D., Research Fellow in Pharmacology (from July 15, 1966 through September 30, 1966).

Asao Nakamura, D.Sc., Research Fellow in Pharmacology (resigned October 31, 1966).

Richard K. Orkand, Ph.D., Research Fellow in Neurophysiology and Neuropharmacology (through August 31, 1966).

Rosalba Pluchino, M.Pharm., Research Fellow in Pharmacology (from September 1, 1966).

Salvatore B. Pluchino, M.D., Research Fellow in Pharmacology (from September 1, 1966).

Mirjana Rabadjija, M.D., Research Fellow in Pharmacology.

U. Ingrid Richardson, Ph.D., Research Fellow in Pharmacology.

Charles B. Smith, M.D., Research Fellow in Pharmacology (resigned July 31, 1966).

Emrys W. Thomas, Ph.D., Research Fellow in Pharmacology (resigned July 31, 1966).

George E. Vaillant, M.D., Research Fellow in Pharmacology (through July 31, 1966).

Cornelis Van Der Vlies, M.S., Research Fellow in Pharmacology (from November 1, 1966 through December 31, 1966).

Teow Seng Yeoh, M.B., B.S., Research Fellow in Pharmacology (from August 15, 1966).

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Affiliated:

Peter B. Dews, M.B., Ch.B., Ph.D., A.M., (Hon.), Stanley Cobb Professor of Psychiatry and Psychobiology.

Torsten N. Wiesel, M.D., Professor of Physiology (from January 1, 1967).

Walter R. Burack, M.D., Clinical Associate in Medicine.

Milton H. Alper, M.D., Clinical Associate in Anesthesia.

## *Required Course*

Pharmacology A. *Second Year.* — The course in Pharmacology consists of lectures, demonstrations, experimental laboratory exercises and conferences. Concepts of general importance in pharmacology and toxicology are presented and the opportunity is provided for stu-

dents to become acquainted with important drugs. Emphasis is placed on those actions of pharmacological agents which help in understanding the disordered physiology of disease and which are of importance in the rational treatment of disease. The mode of action of important drugs is discussed. In the laboratory, the student is able to become acquainted at first hand with some of the experimental facts, obtained from studies on man and animals, which provide the starting points for the analysis of pharmacological effects.

SECOND YEAR — HOURS

Lectures. Dr. Trendelenburg and Associates. One hour, three times a week: Tuesday, Thursday and Saturday mornings, first half year. Members of the staff of the Department of Pharmacology will continue the teaching of Pharmacology in collaboration with other departments in the integrated program of the second half year.

Laboratory work and conferences. Dr. Trendelenburg and Associates. Tuesday mornings, first half year. Further exercises in Pharmacology will be conducted as part of the integrated program of the second half year. 120

## *Fourth Year Elective Courses**

BLOCK COURSES — RESEARCH

803. Endocrine Pharmacology. Dr. Tashjian.
804. Molecular Structure and Biological Activity. Dr. Jardetzky.
805. Pharmacology of Autonomic Nervous System. Dr. Trendelenburg. (*Same course as Pharmacology 309, Faculty of Arts and Sciences.*)
806. Metabolism of Biologically Active Amines. Drs. N. Weiner and Draskoczy.
808. Myocardial Contraction; a Consideration of the Performance of the Heart from the Point of View of Muscle Physiology. Dr. Blinks.
810. Receptor Theory. Investigation of the Mechanism Relating Dose of a Drug and its Stimulant or Blocking Activity. Dr. Waud.
811. Central Nervous System Physiology. Dr. Hubel.
812. Transport Processes Related to Pinocytosis as Studied in Tissue Cultures. Dr. Ryser.
813. Neurochemistry of Catecholamines or Acetylcholine. Dr. L. T. Potter. Will not be offered in 1966–1967.

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

814. Experimental Analysis of Behavior and of Drugs Affecting Behavior in Laboratory Animals. Drs. Dews, Morse, and Kelleher. (*Same course as Psychiatry 804.*)
815. Mode of Hormone Action. Dr. Sharp.

LONGITUDINAL COURSES

701. Selected Topics in Pharmacology. Dr. Trendelenburg and Associates.
702. Pharmacotherapeutics. Dr. J. Koch-Weser, Associates, and Members of the Department of Medicine. (*Same course as Medicine 716.*)
703. Molecular Structure and Biological Specificity. Dr. Jardetzky.

## Department of Physiology

David H. Hubel, M.D., A.M. (hon.), Professor of Neurophysiology, and Head of the Department (from January 1, 1967).

A. Clifford Barger, M.D., Robert Henry Pfeiffer Professor of Physiology.

Eugene M. Landis, M.D., Ph.D., S.M. (hon.), A.M. (hon.), George Higginson Professor of Physiology (on sabbatical leave September 1, 1966 through June 30, 1967).

John R. Pappenheimer, Ph.D., Career Investigator of the American Heart Association, and Visiting Professor of Physiology.

Torsten N. Wiesel, M.D., Professor of Physiology (from January 1, 1967).

*Arthur K. Solomon, Ph.D., D.Phil., Associate Professor of Biophysics.

T. Hastings Wilson, M.D., Ph.D., A.M. (hon.), Associate Professor of Physiology, and Acting Head of the Department (through December 31, 1966).

S. Roy Caplan, Ph.D., Assistant Professor of Biophysics.

Peter F. Curran, Ph.D., Assistant Professor of Biophysics.

Leon Goldstein, Ph.D., Assistant Professor of Physiology.

H. Maurice Goodman, Ph.D., Assistant Professor of Physiology, and Tutor in Physiology.

Elwood Henneman, M.D., Assistant Professor of Physiology, and Ella Sachs Plotz Fellow in Physiology.

Donald L. D. Caspar, Ph.D., Lecturer on Biophysics at The Children's Hospital.

Carolyn Cohen, Ph.D., Lecturer on Biophysics at The Children's Hospital.

Richard D. Berlin, M.D., Associate in Physiology.

Wolfgang Epstein, M.D., Associate in Biophysics.

S. Richard Heisey, S.D., Associate in Physiology.

James A. Herd, M.D., Associate in Physiology.

* Appointment under the Committee on Medical Research in Biophysics.

Stanley G. Schultz, M.D., Associate in Biophysics.

David C. Freeman, S.B., Research Associate in Neurophysiology (from November 1, 1966).

Claude M. GaryBobo, Ph.D., Research Associate in Biophysics (from October 1, 1966).

Paul W. Kent, Ph.D., D.Phil., Research Associate in Physiology (from January 1, 1967).

Tracy B. Miller, Ph.D., Research Associate in Physiology.

William Simon, Ph.D., Research Associate in Physiology.

Thomas U. L. Biber, M.D., Instructor in Biophysics (from September 16, 1966).

James H. Butt, 2d, M.D., Research Fellow in Physiology (from November 15, 1966).

Robert C. Cantu, M.D., Research Fellow in Physiology.

John E. Chimiosky, M.D., Research Fellow in Physiology (through July 31, 1966).

Helen F. Cserr, Ph.D., Research Fellow in Physiology.

Martin Davies, Ph.D., Research Fellow in Biophysics.

LeeRoy G. Jones, M.D., Research Fellow in Physiology.

Lorne M. Mendell, Ph.D., Research Fellow in Physiology.

Sara J. Patkin, Ph.D., Research Fellow in Physiology.

Gillian Rich, Ph.D., Research Fellow in Biophysics.

Ramadan Sha'afi, Ph.D., Research Fellow in Biophysics.

Joseph L. Stinson, M.D., Research Fellow in Physiology.

Aubrey Taylor, Ph.D., Research Fellow in Biophysics.

Ernest M. Wright, Ph.D., Research Fellow in Biophysics (through August 31, 1966).

Richard M. Zakheim, M.D., Research Fellow in Physiology.

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Affiliated:

James T. Irving, Ph.D., M.D., Professor of Physiology at the Forsyth Dental Infirmary for Children.

Jean Mayer, Ph.D., D.Sc., Professor of Nutrition, S.P.H.

Miles A. Crenshaw, Ph.D., Instructor in Physiology at the Forsyth Dental Infirmary for Children.

## PHYSIOLOGY

Stephen S. Rothman, D.D.S., Ph.D., Instructor in Physiology in the School of Dental Medicine.

### *Required Course*

Physiology A. *First Year.* — During the first semester, as an introduction to physiology, lectures are designed to acquaint the student with the fundamental aspects of cardiovascular, renal, respiratory, and acid-base physiology, and to consider in detail those portions that are essential to an understanding of the phenomena of health and disease in man. By means of laboratory exercises the student is introduced to the observational methods and techniques available for studying various physiological functions in man. Emphasis is placed upon exercises illustrating in animals the experimental procedures employed for the detailed analysis of function and for the acquisition of a fundamental knowledge of some areas of physiology. Conferences and demonstrations supplement the more formal instruction in these areas, i.e. cardiovascular, renal, respiratory, and acid-base physiology.

During the second semester the lectures and laboratory work in physiology are interwoven with those given by the Departments of Anatomy and Biological Chemistry.

Principles of gastrointestinal physiology and endocrinology are covered. The fate of ingested food stuffs is described including the secretion of enzymes, digestion in the gastrointestinal tract and absorption of these products of digestion. The functions of the liver are considered, with special emphasis on those related to the secretion of bile. The endocrine regulation of metabolism, growth and reproduction is presented, with laboratory work conducted in small groups. These exercises are designed to illustrate special techniques currently employed in endocrine research.

The last period, duration five weeks, is devoted to neurosciences, beginning with consideration of conduction, excitation and inhibition as physico-chemical events at nerve membranes. The motor systems are surveyed in ascending fashion, beginning with muscles and continuing through the spinal cord and brainstem to the cerebral cortex. Sensory systems are considered with special emphasis on vision. Higher level function, such as sleep and consciousness, are discussed in the final week. Neuroanatomy and neurophysiology are considered as a unit and the teaching is done in close collaboration with the departments of Neurobiology and Anatomy.

FIRST YEAR HOURS

Lectures and laboratory work. Drs. Barger, Berlin, Curran, Goldstein, Goodman, Heisey, Henneman, Herd, Hubel, Pappenheimer, Simon, Solomon, Wiesel, and Wilson. 220

## *Fourth Year Elective Courses**

BLOCK COURSE

501. Teaching Assistantships in Physiology. Drs. Goldstein, Goodman, Heisey, and Wilson.

BLOCK COURSES — RESEARCH

801. Cellular Physiology: Enzymatic Regulation. Dr. Berlin.
802. Cerebrospinal Fluid; Comparative Physiology. Dr. Heisey.
803. Circulatory Physiology: Autonomic Control of the Cardiovascular System. Dr. Herd.
804. Circulatory Physiology: Capillary Blood Vessels. Dr. Landis.
805. Circulatory Physiology: Cardiovascular and Renal Function. Dr. Barger.
806. Central Nervous System: Synaptic Transmission, Spinal Reflexes. Dr. Henneman.
807. Endocrine Regulation of Growth and Metabolism. Dr. Goodman.
808. Intestinal Absorption. Dr. Wilson.
809. Physiology of Cerebral Fluids. Dr. Pappenheimer.
810. Renal Physiology and Regulation. Dr. Goldstein.
811. Mathematics and Computers in Physiology. Dr. W. Simon.
812. Pancreatic Secretion. Dr. Rothman.
821. Transport Processes in Biological Membranes. Dr. A. K. Solomon. (*Same course as Biophysics 301, Faculty of Arts and Sciences.*)
822. Mechanism of Ion Transport in Intestine and Frog Skin. Dr. Curran. (*Same course as Biophysics 303, Faculty of Arts and Sciences.*)
823. Molecular Organization and Assembly of Biological Structures. Dr. Caspar. (*Same course as Biophysics 306, Faculty of Arts and Sciences.*)
824. Structure of Nucleic Acids and Nucleoproteins. Dr. Langridge. (*Same course as Biophysics 307, Faculty of Arts and Sciences.*)
825. Structural Aspects of Muscle Contraction and Blood Coagulation. Dr. C. Cohen. (*Same course as Biophysics 308, Faculty of Arts and Sciences.*)
826. Fluid Transport in Vertebrates. Dr. J. Diamond. (*Same course as Biophysics 309, Faculty of Arts and Sciences.*)
827. Ion Transport and Metabolism and Micro-Organisms. Dr. Schultz.
828. Transport Processes in Synthetic Membranes. Dr. S. R. Caplan.

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

# PHYSIOLOGY

LONGITUDINAL COURSES

701. Selected Topics in Physiology. Drs. PAPPENHEIMER and D. D. POTTER. (*Same course as Physiology 202, Faculty of Arts and Sciences.*)
702. Electronic Data Processing Techniques in the Field of Physiology. Dr. W. SIMON and ASSOCIATES.

## Department of Preventive Medicine

David D. Rutstein, M.D., Ridley Watts Professor of Preventive Medicine, and Head of the Department.

Osler L. Peterson, M.D., Visiting Professor of Preventive Medicine.

Theodore Colton, S.D., Assistant Professor of Biostatistics in the Department of Preventive Medicine.

David C. Poskanzer, M.D., Assistant Professor of Preventive Medicine.

Leonard W. Cronkhite, Jr., M.D., Lecturer on Preventive Medicine.

John G. Freymann, M.D., Lecturer on Preventive Medicine.

Sidney S. Lee, M.D., Lecturer on Preventive Medicine, and Associate Dean of the Faculty of Medicine For Hospital Programs.

F. Lloyd Mussells, M.D., C.M., Lecturer on Preventive Medicine.

William B. Kannel, M.D., Associate in Preventive Medicine (part time).

Victor W. Sidel, M.D., Associate in Preventive Medicine.

Murray Eden, Ph.D., Lecturer on Preventive Medicine.

Leon J. Taubenhaus, M.D., Lecturer on Preventive Medicine.

Alexander M. Burgess, Jr., M.D., Research Associate in Preventive Medicine.

William P. Castelli, M.D., Research Associate in Preventive Medicine.

Ivan J. Fahs, Ph.D., Research Associate in Preventive Medicine.

Sonja J. Hemmer, A.M., Research Associate in Preventive Medicine (from November 1, 1966).

Rita J. Nickerson, A.M., Research Associate in Preventive Medicine.

Alfred F. Popoli, S.M., Research Associate in Preventive Medicine (from September 15, 1966).

Thomas F. Weiss, Ph.D., Research Associate in Preventive Medicine.

Janet T. Wittes, A.M., Research Associate in Preventive Medicine (from September 1, 1966).

Robert C. Buxbaum, M.D., Instructor in Preventive Medicine.

Paul S. Levy, S.D., Instructor in Preventive Medicine.

Marcello Martinelli, M.D., Research Fellow in Preventive Medicine (from October 1, 1966 through February 28, 1967).

Roger H. Sweet, M.D., Research Fellow in Preventive Medicine.

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Affiliated:

William G. Cochran, M.A., Professor of Statistics, A.&S.

Robert B. Reed, Ph.D., Professor of Biostatistics, S.P.H.

Jane Worcester, Dr.P.H., Professor of Biostatistics and Epidemiology, S.P.H.

Albert Damon, Ph.D., M.D., Lecturer on Anthropology, Research Associate in Medical Anthropology, Lecturer on Anthropology, S.P.H.

Louis Weinstein, Ph.D., M.D., Lecturer on Infectious Diseases.

Jacob J. Feldman, Associate Professor of Biostatistics, S.P.H.

The preventive aspects of medicine and its various specialties are taught in all departments of the Medical School, and arrangements are made for the integration of such teaching with the more formal teaching in the required course in preventive medicine. An effort is made to stress those aspects of preventive medicine which concern the practicing physician, rather than those which concern the public health officer.

## *Required Courses*

Quantitative Methods in Medicine. *First Year.*—Dr. Colton, Prof. Eden, Dr. Levy, and Associates. Instruction in Quantitative Methods in Medicine is tailored to meet the mathematical and statistical background, the needs and the career aspirations of the

individual student. Three simultaneous courses are given: Introductory Biostatistics, Intermediate Biostatistics, and Introductory Biomathematics. To be eligible for admission to the courses in Intermediate Biostatistics or in Introductory Biomathematics, the student with appropriate statistical and mathematical background must pass a qualifying examination with an honor grade.

*Introductory Biostatistics.* This course is concerned with the application of statistical reasoning to medicine and to the logical basis for reaching conclusions from numerical evidence through the systematic presentation of medical data, the analysis and interpretation of variation in biological measurements, methods governing the validity of inferences extrapolated from a sample to a population, and the recognition of common pitfalls and fallacies in the collection, analysis and interpretation of medical data. The course relies heavily on illustrative material from ongoing research and the current medical literature. Emphasis in this course is based on biostatistical principles for use by the future practicing physician as he encounters and interprets laboratory and diganostic data, and as he critically reads the medical literature.

*Intermediate Biostatistics.* This intermediate course is concerned with the theory underlying the material presented in the Introductory Course and includes such additional statistical methods as correlation and regression, analysis of variance, non-parametric statistics and sequential analysis. The course is given from the point of view of the use of biostatistical principles by the medical and biological investigator.

*Introductory Biomathematics.* This mathematics course is concerned mainly with probability theory and the stochastic processes as they relate to the development and use of mathematical models in biological and medical research. Admission to this course is limited to those students whose mathematical background and competence are adequate to interpret recent applications of mathematics to the medical and biological sciences.

Preventive Medicine. *Principal Clinical Year.*—The course in preventive medicine consists of clinics, lectures, and symposia. Basic material in the disciplines of Epidemiology, Biostatistics, and Biomathematics are presented. The preventive aspects of clinical medicine are correlated, with due regard for the rapid changes now going on in

medical care, with information in the fields of social medicine, occupational medicine, medical economics, and man-made diseases.

A Health Resources Survey, evaluating community facilities for the total medical care of specified patients, is required of all students.

| FIRST YEAR | | HOURS |
|---|---|---|
| QUANTITATIVE METHODS IN MEDICINE. — Lectures and laboratory seminar periods. Dr. COLTON, Prof. EDEN, Dr. LEVY, and ASSOCIATES. | | 21 |

| PRINCIPAL CLINICAL YEAR | | HOURS |
|---|---|---|
| Clinics, symposia, and lectures. Drs. RUTSTEIN, PETERSON, and ASSOCIATES, in cooperation with representatives of other departments. | | 70 |
| Social Medicine and Medical Economics | 20 | |
| Epidemiology and Biostatistics | 44 | |
| Man-made Diseases | 6 | |
| Health Resources Survey and individual student conference. | | 50 |

## *Fourth Year Elective Courses**

BLOCK COURSES

501. Advanced Preventive Medicine — General Survey Course. Dr. RUTSTEIN and ASSOCIATES.
502. Epidemiology. Drs. RUTSTEIN, POSKANZER, KANNEL, and SIDEL.
503. Advanced Preventive Medicine — Individual Teaching. Dr. RUTSTEIN and ASSOCIATES.
504M. Neurology and Preventive Medicine. Dr. POSKANZER. (*Same course as Neurology 511M.*)
505. Preventive and Social Medicine in a General Hospital. Dr. SIDEL and ASSOCIATES.
506. Chronic Disease Epidemiology. Drs. RUTSTEIN, KANNEL, POSKANZER, CASTELLI, COLTON, and ASSOCIATES.
507. Medical Care Studies. Drs. PETERSON, BURGESS, and BUXBAUM.

BLOCK COURSES — RESEARCH

801. Biomathematics. Professor EDEN and ASSOCIATES.
802. Biostatistics. Dr. COLTON.
803. Epidemiology. Drs. POSKANZER and KANNEL.
804. Etiological Studies on Atherosclerosis. Dr. RUTSTEIN and ASSOCIATES.

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

805. Medical Care and Medical Economics. Dr. PETERSON and ASSOCIATES.
806. Medical Care Research in a General Hospital. Dr. SIDEL and ASSOCIATES.

LONGITUDINAL COURSES

701. Biostatistics. The Design of Clinical Investigation. Drs. RUTSTEIN and COLTON.
702. Biostatistics. Design of Experiments. Professor COCHRAN. (*Same course as Statistics 140, Faculty of Arts and Sciences.*)
703. Biostatistics. Mathematical Statistics. (*Same course as Statistics 190, Faculty of Arts and Sciences.*)
704. Biostatistics. Introduction to Stochastic Processes. (*Same course as Statistics 171, Faculty of Arts and Sciences.*)

## Department of Psychiatry

Jack R. Ewalt, M.D., A.M. (hon.), Bullard Professor of Psychiatry, Head of the Department at the Massachusetts Mental Health Center and Chairman of the Executive Committee of the Department of Psychiatry.

Gerald Caplan, M.D., D.P.M., Clinical Professor of Psychiatry.

Peter B. Dews, M.B., Ch.B., Ph.D., A.M. (hon.), Stanley Cobb Professor of Psychiatry and Psychobiology (on sabbatical leave February 1, 1967 through July 31, 1967).

George E. Gardner, Ph.D., M.D., Professor of Psychiatry at The Children's Hospital.

Elvin V. Semrad, M.D., Clinical Professor of Psychiatry.

Henry M. Fox, M.D., Associate Clinical Professor of Psychiatry.

Leston L. Havens, M.D., Associate Clinical Professor of Psychiatry.

Gregory Rochlin, M.D., Associate Clinical Professor of Psychiatry.

Philip Solomon, M.D., Associate Clinical Professor of Psychiatry.

Alfred H. Stanton, M.D., A.M. (hon.), Associate Professor of Psychiatry at the McLean Hospital.

Elizabeth R. Zetzel, M.D., Associate Clinical Professor of Psychiatry.

Norman W. Bell, Ph.D., Assistant Professor of Sociology in the Department of Psychiatry at the McLean Hospital (on leave September 1, 1966 through June 30, 1967).

Morris E. Chafetz, M.D., Assistant Clinical Professor of Psychiatry.

Thomas F. Dwyer, M.D., Assistant Clinical Professor of Psychiatry.

Stanley H. Eldred, M.D., Assistant Professor of Psychiatry at the McLean Hospital.

Frank R. Ervin, M.D., Assistant Professor of Psychiatry at the Massachusetts General Hospital, and Tutor in Psychiatry.

Daniel H. Funkenstein, M.D., Assistant Professor of Psychiatry.

Sanford R. Gifford, M.D., Assistant Clinical Professor of Psychiatry.

Lester Grinspoon, M.D., Assistant Clinical Professor of Psychiatry.

Louisa P. Howe, Ph.D., Assistant Professor of Sociology in the Department of Psychiatry.

Bellenden R. Hutcheson, M.D., Assistant Clinical Professor of Psychiatry.

Eric H. Lenneberg, Ph.D., Assistant Professor of Psychology in the Department of Psychiatry at The Children's Hospital (resigned January 31, 1967).

Edward A. Mason, M.D., Assistant Clinical Professor of Psychiatry.

Jack H. Mendelson, M.D., Assistant Professor of Psychiatry at the Massachusetts General Hospital (resigned December 31, 1966).

Elliot G. Mishler, Ph.D., Assistant Clinical Professor of Psychology in the Department of Psychiatry.

David J. Myerson, M.D., Assistant Clinical Professor of Psychiatry.

John C. Nemiah, M.D., Assistant Professor of Psychiatry, Acting Head of the Department at the Massachusetts General Hospital, and Tutor in Psychiatry.

David Shapiro, Ph.D., Assistant Professor of Psychology in the Department of Psychiatry.

Peter E. Sifneos, M.D., Assistant Professor of Psychiatry at the Massachusetts General Hospital.

Samuel Silverman, M.D., Assistant Clinical Professor of Psychiatry.

Alan A. Stone, M.D., Assistant Professor of Psychiatry at the McLean Hospital.

George A. Talland, Ph.D., Assistant Professor of Psychology in the Department of Psychiatry.

Avery D. Weisman, M.D., Assistant Clinical Professor of Psychiatry.

Torsten N. Wiesel, M.D., Assistant Professor of Neurophysiology in the Department of Psychiatry (through December 31, 1966).

Peter H. Wolff, M.D., Assistant Professor of Psychiatry at The Children's Hospital.

Norman E. Zinberg, M.D., Assistant Clinical Professor of Psychiatry.

Francis J. Braceland, M.D., Lecturer on Psychiatry.

Francis L. A. de Marneffe, M.B., B.S., Lecturer on Psychiatry.

Erik H. Erikson, A.M. (hon.), Lecturer on Psychiatry.

Harold S. Albert, M.D., C.M., Clinical Associate in Psychiatry.

Martin A. Berezin, M.D., Clinical Associate in Psychiatry.

Howard T. Blane, Ph.D., Associate in Psychology in the Department of Psychiatry at the Massachusetts General Hospital.

Samuel Bojar, M.D., Clinical Associate in Psychiatry.

Gaylord P. Coon, M.D., Clinical Associate in Psychiatry.

Edward M. Daniels, M.D., Clinical Associate in Psychiatry.

Frank C. d'Elseaux, M.D., Clinical Associate in Psychiatry.

Henry U. Grunebaum, M.D., Clinical Associate in Psychiatry.

Lester L. Hasenbush, M.D., Clinical Associate in Psychiatry.

Howard T. Hermann, M.D., Associate in Psychiatry at the McLean Hospital.

Paul M. Howard, M.D., Clinical Associate in Psychiatry.

Irene Jakab, M.D., Ph.D., Associate in Psychiatry at the McLean Hospital.

Ralph J. Kahana, M.D., Clinical Associate in Psychiatry.

Merton J. Kahne, M.D., Clinical Associate in Psychiatry.

Stanley S. Kanter, M.D., Clinical Associate in Psychiatry.

Sidney Levin, M.D., Clinical Associate in Psychiatry.

Richard Longabaugh, Ed.D., Associate in Social Psychology in the Department of Psychiatry at the McLean Hospital.

Alfred O. Ludwig, M.D., Clinical Associate in Psychiatry.

John E. Mack, M.D., Clinical Associate in Psychiatry.

John M. MacKenzie, M.D., Clinical Associate in Psychiatry.

Elizabeth S. Makkay, M.D., Associate in Psychiatry at The Children's Hospital.

Robert H. McCarter, M.D., Clinical Associate in Psychiatry.

Doris Menzer-Benaron, M.D., Clinical Associate in Psychiatry.

Joseph J. Michaels, M.D., Clinical Associate in Psychiatry (died November 19, 1966).

Norbett L. Mintz, Ph.D., Associate in Psychology in the Department of Psychiatry at the McLean Hospital.

Arnold H. Modell, M.D., Clinical Associate in Psychiatry.

Benjamin J. Murawski, Ph.D., Associate in Psychology in the Department of Psychiatry.

William F. Murphy, Ph.B., M.D., Clinical Associate in Psychiatry.

Edmund C. Payne, Jr., M.D., Clinical Associate in Psychiatry.

Gardner C. Quarton, M.D., Clinical Associate in Psychiatry.

Benjamin C. Riggs, M.D., Clinical Associate in Psychiatry (resigned September 8, 1966).

Ascanio M. Rossi, Ph.D., Associate in Psychology in the Department of Psychiatry.

Edward J. Sachar, M.D., Associate in Psychiatry (resigned January 31, 1967).

Harvey M. Shein, M.D., Associate in Psychiatry at the McLean Hospital.

Laurence D. Trevett, M.D., Clinical Associate in Psychiatry.

Arthur F. Valenstein, M.D., Clinical Associate in Psychiatry.

John Vorenberg, M.D., Clinical Associate in Psychiatry.

Nancy E. Waxler, Ph.D., Associate in Social Psychology in the Department of Psychiatry.

Justin L. Weiss, Ph.D., Clinical Associate in Psychology in the Department of Psychiatry.

Henry Wermer, M.D., Clinical Associate in Psychiatry.

Donald Wexler, M.D., Clinical Associate in Psychiatry.

Gerald Adler, M.D., Lecturer on Psychiatry.

Louis S. Chase, M.D., Lecturer on Psychiatry.

Marc A. Fried, Ph.D., Lecturer on Psychology in the Department of Psychiatry.

Milton Greenblatt, M.D., Lecturer on Psychiatry.

Kenneth J. Jones, Ed.D., Lecturer on Education in the Department of Psychiatry.

Lewis B. Klebanoff, Ph.D., Lecturer on Psychology in the Department of Psychiatry.

Cecil Mushatt, M.D., Lecturer on Psychiatry.

Charles A. Pinderhughes, M.D., Lecturer on Psychiatry

Eveoleen N. Rexford, M.D., Lecturer on Psychiatry.

Leon N. Shapiro, M.D., Lecturer on Psychiatry.

John P. Spiegel, M.D., Lecturer on Psychiatry.

Robert S. Weiss, Ph.D., Lecturer on Sociology in the Department of Psychiatry.

Charles V. Willie, Ph.D., Visiting Lecturer on Sociology in the Department of Psychiatry (from September 1, 1966).

Clint D. Anderson, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Frank Baker, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Richard J. Bonier, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Milton Budoff, Ph.D., Research Associate in Psychology in the Department of Psychiatry (from December 1, 1966).

Aydin Cankardas-Wysocki, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Rose L. Coser, Ph.D., Research Associate in Sociology in the Department of Psychiatry.

Andrew B. Crider, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Gerald E. Cubelli, M.S., Research Associate in Psychiatry.

Alberto DiMascio, Ph.D., Research Associate in Psychology in the Department of Psychiatry

Arthur S. Elstein, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Charles L. Feldman, Sc.D., Research Associate in Biomathematics in the Department of Psychiatry.

Miriam F. Fiedler, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Franklin B. Fogelson, Ph.D., Research Associate in Social Welfare in the Department of Psychiatry.

Bernard Gray, Ph.D., Research Associate in Psychology in the Department of Psychiatry (from October 1, 1966).

Robert H. Harrison, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Charles Hersch, Ph.D., Research Associate in Psychology in the Department of Psychiatry (from December 1, 1966).

Mathilda S. Holzman, Ph.D., Research Associate in Psychology in the Department of Psychiatry (from August 15, 1966).

Dorothy S. Huntington, Ph.D., Research Associate in Psychology in the Department of Psychiatry (resigned December 31, 1966).

David J. Ingle, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Robert L. James, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Helen J. Kenney, Ed.D., Research Associate in Psychology in the Department of Psychiatry.

Philip E. Kubzansky, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Frederic M. Levine, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Joseph Mayer, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Peter J. M. McEwan, Ph.D., Research Associate in Sociology in the Department of Psychiatry.

Murray Melbin, Ph.D., Research Associate in Social Psychology in the Department of Psychiatry.

Nancy K. Mello, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

David P. Michener, M.D., Research Associate in Psychiatry.

Robert C. Misch, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

James J. Muller, M.A., Research Associate in Psychology in the Department of Psychiatry.

Peter E. Nathan, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Florence S. Nichols, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Charlotte E. Owens, M.P.H., Research Associate in Community Mental Health in the Department of Psychiatry.

Colin M. Parkes, M.D., Research Associate in Psychiatry (through August 31, 1966).

Daniel Pershonok, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Joseph C. Rheingold, M.D., Ph.D., Research Associate in Psychiatry.

Herbert C. Schulberg, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Richard I. Shader, M.D., Research Associate in Psychiatry.

Alan P. Sheldon, M.B., Ch.B., Research Associate in Psychiatry.

Marvin Snider, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Irene Pierce Stiver, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Nancy C. Waugh, Ph.D., Research Associate in Psychology in the Department of Psychiatry.

Morris H. Adler, M.D., Instructor in Psychiatry.

Henry G. Altman, M.D., Instructor in Psychiatry.

William S. Appleton, M.D., Instructor in Psychiatry.

Nicholas C. Avery, M.D., Instructor in Psychiatry.

Jane E. Bain, M.B., Ch.B., Instructor in Psychiatry.

Mary D. Bain, M.D., Instructor in Psychiatry.

Tully Benaron, M.D., Instructor in Psychiatry.

Norman R. Bernstein, M.D., Instructor in Psychiatry.

William F. Beuscher, M.D., Instructor in Psychiatry.

William A. Binstock, M.D., Instructor in Psychiatry.

Graham B. Blaine, Jr., M.D., Instructor in Psychiatry.

David Blau, M.D., Instructor in Psychiatry.

John R. Blitzer, M.D., Instructor in Psychiatry.

Lenore A. Boling, M.D., Instructor in Psychiatry.

Frances J. Bonner, M.D., Instructor in Psychiatry.
Irving D. Bornstein, M.D., Instructor in Psychiatry.
Robert L. Bragg, M.D., Instructor in Psychiatry.
Benjamin B. Brussel, M.D., Instructor in Psychiatry.
Dan H. Buie, Jr., M.D., Instructor in Psychiatry.
Dexter M. Bullard, Jr., M.D., Instructor in Psychiatry.
Bernard L. Busfield, Jr., M.D., Instructor in Psychiatry.
Arthur J. Cain, M.D., Instructor in Psychiatry.
Enid F. Caldwell, M.D., Instructor in Psychiatry (from September 1, 1966).
Lloyd M. Caplan, M.D., Instructor in Psychiatry.
William G. Carmichael, M.D., Instructor in Psychiatry.
Jacob Christ, M.D., Instructor in Psychiatry.
John G. Clark, Jr., M.D., Instructor in Psychiatry.
Herbert S. Cline, M.D., Instructor in Psychiatry.
Raquel E. Cohen, M.D., Instructor in Psychiatry.
Roy M. Coleman, M.D., Instructor in Psychiatry.
Jay L. Collins, M.D., Instructor in Psychiatry.
John C. Coolidge, M.D., Instructor in Psychiatry.
Richard E. Cutler, M.D., Instructor in Psychiatry.
Chester C. d'Autremont, M.D., Instructor in Psychiatry.
Edwin M. Davidson, M.D., Instructor in Psychiatry.
Gerald E. Davidson, M.D., Instructor in Psychiatry.
Daniel C. Dawes, M.D., Instructor in Psychiatry.
Max Day, M.D., Instructor in Psychiatry.
Paul R. Dinsmore, M.D., Instructor in Psychiatry.
Frederick J. Duhl, M.D., Instructor in Psychiatry.
Robert M. Eisendrath, Jr., M.D., Instructor in Psychiatry.
Ralph P. Engle, Jr., M.D., Instructor in Psychiatry.
Henry C. Everett, M.D., Instructor in Psychiatry.
Abraham D. Fineman, M.D., Instructor in Psychiatry.
Thomas Frank, M.D., Instructor in Psychiatry.
Freddy H. Frankel, M.B., Ch.B., Instructor in Psychiatry.
Donald S. Gair, M.D., Instructor in Psychiatry.
Richard Galdston, M.D., Instructor in Psychiatry.
Phillip H. Gates, M.D., Instructor in Psychiatry.

George E. Gifford, Jr., M.D., Instructor in Psychiatry.
Benjamin F. Gill, M.D., Instructor in Psychiatry.
Herbert J. Goldings, M.D., Instructor in Psychiatry.
Gertrude R. Greenblatt, M.D., Instructor in Psychiatry.
Thomas P. Hackett, M.D., Instructor in Psychiatry.
James A. Haycox, M.D., Instructor in Psychiatry.
Francis C. Hersey, M.D., Instructor in Psychiatry.
Helen M. Herzan, M.D., Instructor in Psychiatry.
John A. Hobson, M.D., Instructor in Psychiatry.
Richmond Holder, M.D., Instructor in Psychiatry.
Carlos L. Hudson, M.D., Instructor in Psychiatry.
Robert W. Hyde, M.D., Instructor in Psychiatry.
Phillip L. Isenberg, M.D., Instructor in Psychiatry.
Peter B. Jenney, M.D., Instructor in Psychiatry.
Samuel Kaplan, M.D., Instructor in Psychiatry.
Irving Kaufman, M.D., Instructor in Psychiatry.
Melvin M. Kayce, M.D., Instructor in Psychiatry.
Arthur R. Kravitz, M.D., Instructor in Psychiatry.
Edmund N. Kudarauskas, M.D., Instructor in Psychiatry.
John H. Lamont, M.D., Instructor in Psychiatry.
George B. Lawson, M.D., Instructor in Psychiatry.
Cavin P. Leeman, M.D., Instructor in Psychiatry.
Don R. Lipsitt, M.D., Instructor in Psychiatry.
Maria Lorenz, M.D., Instructor in Psychiatry.
Dorothy A. MacNaughton, M.B., Ch.B., Instructor in Psychiatry.
John T. Maltsberger, 3d., M.D., Instructor in Psychiatry.
Walter Mann, Ph.D., M.D., Instructor in Psychiatry.
Michael T. McGuire, M.D., Instructor in Psychiatry.
William F. McLaughlin, M.D.,C.M., Instructor in Psychiatry.
Elinor Meiss, M.D., Instructor in Psychiatry.
Edward Messner, M.D., Instructor in Psychiatry.
Halim Mitry, M.B., Ch.B., Instructor in Psychiatry.
Kathleen M. Mogul, M.D., Instructor in Psychiatry.
Samuel L. Mogul, M.D., Instructor in Psychiatry.
Thomas A. Morris, Jr., M.D., Instructor in Psychiatry.

Barbara C. G. Mueller, M.D., Instructor in Psychiatry.
Egbert H. Mueller, M.D., Instructor in Psychiatry.
Nancy P. Nichols, M.D., Instructor in Psychiatry.
Malkah T. Notman, M.D., Instructor in Psychiatry.
Silvio J. Onesti, Jr., M.D.,C.M., Instructor in Psychiatry.
Vernon D. Patch, M.D., Instructor in Psychiatry.
Richard R. Peebles, Ph.D., Instructor in Psychology in the Department of Psychiatry.
Jalna A. Perry, M.D., Instructor in Psychiatry.
Maxwell G. Potter, M.D., Instructor in Psychiatry.
Peter Reich, M.D., Instructor in Psychiatry.
John F. Reichard, M.D., Instructor in Psychiatry.
Robert C. Reid, M.D., Instructor in Psychiatry.
David E. Reiser, M.D., Instructor in Psychiatry.
George W. Rever, M.D., Instructor in Psychiatry.
Michael D. Robbins, M.D., Instructor in Psychiatry.
Phelps M. Robinson, M.D., Instructor in Psychiatry.
Mathew Ross, M.D., Instructor in Psychiatry.
Donald H. Russell, M.D., Instructor in Psychiatry.
Joseph C. Sabbath, M.D., C.M., Instructor in Psychiatry.
Robert D. Schnitzer, Ph.D., Instructor in Psychology in the Department of Psychiatry.
Lionel A. Schwartz, M.D., Instructor in Psychiatry.
Joae G. Selzer, M.D., Instructor in Psychiatry.
Ralph G. Semon, Ph.D., Instructor in Psychology in the Department of Psychiatry.
Adele S. Shambaugh, M.D., Instructor in Psychiatry.
Benjamin Shambaugh, M.D., Instructor in Psychiatry.
Julius Silberger, Jr., M.D., Instructor in Psychiatry.
Judith G. Singer, Ph.D., Instructor in Psychology in the Department of Psychiatry.
Richard H. Smith, M.D., Instructor in Psychiatry.
Stewart R. Smith, M.D., Instructor in Psychiatry.
Benson R. Snyder, M.D., Instructor in Psychiatry.
Harold D. Stalvey, M.D., Instructor in Psychiatry.
Malvina Stock, M.D., Instructor in Psychiatry.

William E. Stone, M.D., Instructor in Psychiatry.
John B. Sturrock, M.B., B.S., Instructor in Psychiatry.
Helen H. Tartakoff, M.D., Instructor in Psychiatry.
Irwin Taube, M.D., Instructor in Psychiatry.
Suzanne T. van Amerongen, Ph.D., M.D., Instructor in Psychiatry.
Maurice Vanderpol, M.D., Instructor in Psychiatry.
Mark M. Walter, Jr., M.D., Instructor in Psychiatry.
Stanley Walzer, M.D., Instructor in Psychiatry.
Stephen L. Washburn, M.D., Instructor in Psychiatry.
Paul L. Watson, M.D., Instructor in Psychiatry.
Jerome L. Weinberger, M.D., Instructor in Psychiatry.
Leonard Weiner, M.D., Instructor in Psychiatry.
Lionelle D. Wells, M.D., Instructor in Psychiatry.
Olga S. Wermer, M.D., Instructor in Psychiatry.
Lee H. Willer, M.D., Instructor in Psychiatry.
Harold W. Williams, Jr., M.D., Instructor in Psychiatry.
Richard V. Wilson, M.D., Instructor in Psychiatry.
Howard E. Wulsin, M.D., Instructor in Psychiatry.
Barbara L. Aeschliman, M.D., Assistant in Psychiatry.
Sanford M. Autor, Ph.D., Assistant in Psychology in the Department of Psychiatry (from September 1, 1966).
Ernest W. Bergel, M.D., Assistant in Psychiatry.
Jane M. Berman, M.D., Assistant in Psychiatry.
Ruth B. Beuscher, M.D., Assistant in Psychiatry.
Carl L. Birk, M.D., Assistant in Psychiatry.
Anna C. Brown, M.D., Assistant in Psychiatry.
Franklin Carter, M.D., Assistant in Psychiatry.
Randolph Catlin, Jr., M.D., Assistant in Psychiatry.
George Chalpin, M.D., Assistant in Psychiatry.
Mignon C. Chasen, M.D., Assistant in Psychiatry.
George Cloutier, M.D., Assistant in Psychiatry.
Howard A. Corwin, M.D., Assistant in Psychiatry.
William M. Crowell, M.D., Assistant in Psychiatry.
Hadassah S. Daniels, M.D., Assistant in Psychiatry.
Dan A. Ditmore, M.D., Assistant in Psychiatry.

Pattison Esmiol, M.D., Assistant in Psychiatry.
Joel H. Feigon, M.D., Assistant in Psychiatry.
Albert H. Feingold, M.D., Assistant in Psychiatry.
Donald J. Fern, M.D., Assistant in Psychiatry.
Bruce W. Fischberg, M.D., Assistant in Psychiatry.
Alice M. Fleming, M.D., Assistant in Psychiatry.
Leonard J. Friedman, M.D., Assistant in Psychiatry.
Francis P. Gallagher, M.D., Assistant in Psychiatry (from November 1, 1966).
Max Geller, M.D., Assistant in Psychiatry.
Joseph F. Greaney, M.D., Assistant in Psychiatry (resigned August 31, 1966).
Jack Green, M.D.,C.M., Assistant in Psychiatry.
Nicholas A. Green, M.D., Assistant in Psychiatry.
Peter B. Hagopian, M.D., Assistant in Psychiatry.
Wallace F. Haley, Jr., M.D., Assistant in Psychiatry.
Dorr F. Hallenbeck, Jr., M.D., Assistant in Psychiatry.
Herbert I. Harris, M.D., Assistant in Psychiatry.
Pierre Johannet, M.D., Assistant in Psychiatry.
Eda M. Kahana, M.D., Assistant in Psychiatry.
Alvin Kahn, M.D., Assistant in Psychiatry.
Judy L. Kantrowitz, Ph.D., Assistant in Psychology in the Department of Psychiatry.
Robert L. Kelley, M.D., Assistant in Psychiatry.
Susan T. Kleeman, M.D., Assistant in Psychiatry.
William Kornfeld, M.D., Assistant in Psychiatry.
Alfred J. R. Koumans, M.D., Assistant in Psychiatry.
Marvin B. Krims, M.D., Assistant in Psychiatry.
Kathryn B. Kris, M.D., Assistant in Psychiatry.
Eliot Landsman, M.D., Assistant in Psychiatry.
Philip Lazaroff, M.D., Assistant in Psychiatry (resigned August 31, 1966).
Rolf A. Lederer, M.B., Ch.B., Assistant in Psychiatry.
Miguel A. Leibovich, M.D., Assistant in Psychiatry.
Herbert O. LeVine, M.D., Assistant in Psychiatry.

Theodore Lindauer, M.D., Assistant in Psychiatry (resigned August 31, 1966).
John B. Livingstone, M.D., Assistant in Psychiatry.
William F. McCourt, M.D., Assistant in Psychiatry.
Dennis J. McCrory, M.D., Assistant in Psychiatry.
Arthur W. McMahon, M.D., Assistant in Psychiatry.
Robert D. Mehlman, M.D., Assistant in Psychiatry.
John F. Merrifield, M.D., Assistant in Psychiatry.
Sophie B. Mintz, Ph.D., Assistant in Psychology in the Department of Psychiatry.
James J. Mullen, M.D., Assistant in Psychiatry.
Henry Musnick, M.D., Assistant in Psychiatry.
Arthur Z. Mutter, M.D., Assistant in Psychiatry (resigned August 31, 1966).
Carol C. Nadelson, M.D., Assistant in Psychiatry.
Theodore Nadelson, M.D., Assistant in Psychiatry.
Julian J. Newman, M.D., Assistant in Psychiatry.
Armand M. Nicholi, Jr., M.D., Assistant in Psychiatry.
Harry S. Olin, M.D., Assistant in Psychiatry.
Donald Ottenstein, M.D., Assistant in Psychiatry.
Alan D. Persky, M.D., Assistant in Psychiatry.
Eugene U. Piazza, M.D., Assistant in Psychiatry.
Alan S. Prager, M.D., Assistant in Psychiatry.
Jack O. Rice, M.D., Assistant in Psychiatry.
Nancy Rollins, M.D., Assistant in Psychiatry.
Eliyahu Rosenheim, Ph.D., Assistant in Psychology in the Department of Psychiatry (from January 1, 1967).
Theodore Sack, M.D., Assistant in Psychiatry.
Lawrence C. Salvesen, M.D., Assistant in Psychiatry.
Albert B. Samaraweera, M.B., B.S., Assistant in Psychiatry.
Paul E. Sapir, M.D., Assistant in Psychiatry.
Harriet R. Schlesinger, M.D., Assistant in Psychiatry.
Peter P. Schuntermann, M.D., Assistant in Psychiatry (from August 15, 1966).
William Sharpe, Jr., M.D., Assistant in Psychiatry.
Theodore C. Sheftel, M.D., Assistant in Psychiatry.

William R. Shelton, M.D., Assistant in Psychiatry.
Nathan T. Sidley, M.D., Assistant in Psychiatry.
Sumner Stone, M.D., Assistant in Psychiatry.
Consuelo K. Tagiuri, M.D., Assistant in Psychiatry.
William D. Temby, M.D., Assistant in Psychiatry.
Helen D. Wallach, M.D., Assistant in Psychiatry (from October 1, 1966).
John L. Weil, M.D., Assistant in Psychiatry.
Robert M. Weiner, M.D., Assistant in Psychiatry.
Frederick E. Whiskin, M.D., Assistant in Psychiatry.
Anna K. Wolff, M.D., Assistant in Psychiatry.
Harold M. Wolman, M.D., Assistant in Psychiatry.
Joan J. Zilbach, M.D., Assistant in Psychiatry.
Albert G. Abriel, M.D., Research Fellow in Psychiatry.
Mathew J. Andresino, A.M., Research Fellow in Psychology in the Department of Psychiatry.
George Bach-Y-Rita, M.D., Research Fellow in Psychiatry.
Peter O. Behan, M.B., Ch.B., Research Fellow in Psychiatry.
Sheila R. Bob, A.B., Research Fellow in Psychology in the Department of Psychiatry (from September 1, 1966).
Colin F. Bolton, M.B., Ch.B., Research Fellow in Psychiatry.
Brian B. Bouton, M.D., Research Fellow in Psychiatry.
Clifford S. Briggin, M.D., Research Fellow in Psychiatry.
Leslie Brooks, M.D., Research Fellow in Psychiatry.
Peter Bryan-Brown, M.B., Ch.B., Research Fellow in Psychiatry.
Harvey M. Budner, M.D., Research Fellow in Psychiatry.
Richard D. Budson, M.D., Research Fellow in Psychiatry.
Pablo P. Cabrera, M.D., Research Fellow in Psychiatry (from September 15, 1966).
Corbett Campbell, M.B., Ch.B., Research Fellow in Psychiatry.
Francisco J. Campos, M.D., Research Fellow in Psychiatry.
Richard M. Chasin, M.D., Research Fellow in Psychiatry.
Robert A. Cole, M.D., Research Fellow in Psychiatry.
Edward A. Conboy, M.D., Research Fellow in Psychiatry.
William D. Davidson, M.D., Research Fellow in Psychiatry.

Marianne Dierks, M.D., Research Fellow in Psychiatry.
Roderick P. Durkin, Ph.D., Research Fellow in Psychology in the Department of Psychiatry (from September 1, 1966).
Anthony E. Elite, M.D., Research Fellow in Psychiatry.
Amir M. Farhadi, M.D., Research Fellow in Psychiatry.
Susan M. Fisher, M.D., Research Fellow in Psychiatry.
Daniel B. Fishman, Ph.D., Research Fellow in Psychology in the Department of Psychiatry.
Paul G. Foster, M.D., Research Fellow in Psychiatry.
Ivan Fras, M.D., Research Fellow in Psychiatry.
Frank M. Gatti, M.D., Research Fellow in Psychiatry.
Eddie H. Harris, M.D., Research Fellow in Psychiatry.
Marjorie J. Hill, Ph.D., Research Fellow in Psychology in the Department of Psychiatry (from September 1, 1966).
John B. Hudson, Ph.D., Research Fellow in Sociology in the Department of Psychiatry.
David Hutchison, M.D., Research Fellow in Psychiatry.
Yukio Ishizuka, M.D., Research Fellow in Psychiatry.
Richard K. Jennings, M.D., Research Fellow in Psychiatry.
Masaya Jimbo, M.D., Research Fellow in Psychiatry (through May 31, 1967).
Alicia M. Karol, M.B., Research Fellow in Psychiatry.
James G. Kavanaugh, Jr., M.D., Research Fellow in Psychiatry.
Robert F. Kenerson, M.D., Research Fellow in Psychiatry.
George S. Klavens, M.D., Research Fellow in Psychiatry.
Dubravko M. Kuftinec, M.D., Research Fellow in Psychiatry.
Robert Mark Leff, A.M., Research Fellow in Psychology in the Department of Psychiatry (from September 1, 1966).
Vicki M. Levi, M.D., Research Fellow in Psychiatry.
John R. Lion, M.D., Research Fellow in Psychiatry.
Stephen Lorch, S.B., Research Fellow in Biomathematics in the Department of Psychiatry, and Tutor in Computer Technology.
Peter C. Ludwig, M.D., Research Fellow in Psychiatry.
John J. MacMahon, M.R.C.S., Research Fellow in Psychiatry.
Peter R. Manes, M.D., Research Fellow in Psychiatry.

Aleksander Mathe, M.D., Research Fellow in Psychiatry.
Brenda K. McGowan, Ph.D., Research Fellow in Psychology in the Department of Psychiatry (from October 1, 1966).
Joanne D. Medalie, Ed.D., Research Fellow in Psychology in the Department of Psychiatry (through August 31, 1966).
Rebecca L. Merchant, A.M., Research Fellow in Psychology in the Department of Psychiatry (from September 1, 1966).
Joel A. Michael, Ph.D., Research Fellow in Psychology in the Department of Psychiatry (from October 1, 1966).
Martin A. Miller, M.D., Research Fellow in Psychiatry.
William J. Nemon, M.D., Research Fellow in Psychiatry.
Motoi Ogata, M.D., Research Fellow in Psychiatry.
Anita Paine, M.D., Research Fellow in Psychiatry.
Karen L. Pajari, M.D., Research Fellow in Psychiatry.
Frank J. Paolitto, M.D., Research Fellow in Psychiatry.
David Pavy, Ph.D., Research Fellow in Anthropology in the Department of Psychiatry (from September 1, 1966).
John K. Pearce, Jr., M.D., Research Fellow in Psychiatry.
Chester A. Pearlman, M.D., Research Fellow in Psychiatry.
Jay M. Pomerantz, M.D., Research Fellow in Psychiatry.
Louise Y. Postman, M.D., Research Fellow in Psychiatry.
Robert L. Pyles, M.D., Research Fellow in Psychiatry.
David L. Raphling, M.D., Research Fellow in Psychiatry.
Peter P. Reilly, Jr., M.D., Research Fellow in Psychiatry.
Mark W. Rhine, M.D., Research Fellow in Psychiatry.
Alexandra M. Rolde, M.D., C.M., Research Fellow in Psychiatry.
Sheldon Roth, M.D., Research Fellow in Psychiatry.
Christopher V. Rowland, Jr., M.D., Research Fellow in Psychiatry.
Jane V. Russell, M.D., Research Fellow in Psychiatry.
Paul L. Russell, M.D., Research Fellow in Psychiatry.
Yoshio Sakamoto, M.D., Research Fellow in Psychiatry (resigned July 31, 1966).
Sirgay Sanger, M.D., Research Fellow in Psychiatry.
Bernardo S. Scheimberg, M.D., Research Fellow in Psychiatry.

Philip W. Shambaugh, M.D., Research Fellow in Psychiatry.
John R. Shaw, M.D., Research Fellow in Psychiatry (resigned August 31, 1966).
Melvin J. Stern, M.D., Research Fellow in Psychiatry.
Lawrence A. Stone, M.D., Research Fellow in Psychiatry.
Larry H. Strasburger, M.D., Research Fellow in Psychiatry.
Roger S. Strauss, L.L.B., Research Fellow in Psychology in the Department of Psychiatry.
Howard J. Weisman, M.D., Research Fellow in Psychiatry.
Norman L. Wilson, Jr., M.D., Research Fellow in Psychiatry.
Raymond C. Yerkes, M.D., Research Fellow in Psychiatry.
Georges Aird, M.D., Teaching Fellow in Psychiatry.
Stewart L. Aledort, M.D., Teaching Fellow in Psychiatry.
Jeffry J. Andresen, M.D., Teaching Fellow in Psychiatry.
Myron L. Belfer, M.D., Teaching Fellow in Psychiatry.
Stephen B. Bernstein, M.D., Teaching Fellow in Psychiatry.
John E. Biddinger, M.D., Teaching Fellow in Psychiatry.
Daniel Birger, M.D., Teaching Fellow in Psychiatry.
Herbert S. Bloch, M.D., Teaching Fellow in Psychiatry.
Robert A. Blum, M.D., Teaching Fellow in Psychiatry.
Clyde D. Brown, M.D., Teaching Fellow in Psychiatry.
Thomas A. Bull, M.D., Teaching Fellow in Psychiatry.
Paul A. Buttenwieser, M.D., Teaching Fellow in Psychiatry.
Charles W. Carl, Jr., M.D., Teaching Fellow in Psychiatry.
Charles W. Casella, M.D., Teaching Fellow in Psychiatry.
Maurice C. Cion, M.D., Teaching Fellow in Psychiatry.
Nicholas S. Craven, M.D., Teaching Fellow in Psychiatry.
James S. Dalsimer, M.D., Teaching Fellow in Psychiatry.
Woodrow M. Donovan, M.D., Teaching Fellow in Psychiatry.
Theodore Dreier, Jr., M.D., Teaching Fellow in Psychiatry.
Hikmet N. Emmanuel, M.B., Ch.B., Teaching Fellow in Psychiatry.
Stuart H. Fine, M.B., Ch.B., Teaching Fellow in Psychiatry.
Joseph L. Finesinger, M.D., Teaching Fellow in Psychiatry.
Irene F. Finstein, M.D., Teaching Fellow in Psychiatry.
Roy G. Fitzgerald, M.D., Teaching Fellow in Psychiatry.

David H. Fram, M.D., Teaching Fellow in Psychiatry.
Cornelia W. Friedman, M.D., Teaching Fellow in Psychiatry.
Christopher C. Gates, M.D., Teaching Fellow in Psychiatry.
William B. Gault, M.D., Teaching Fellow in Psychiatry.
Elliot S. Gershon, M.D., Teaching Fellow in Psychiatry.
William H. Giddy, M.D., Teaching Fellow in Psychiatry.
James F. Gilligan, M.D., Teaching Fellow in Psychiatry.
Ricardo A. Giron, M.D., Teaching Fellow in Psychiatry.
Peter E. Goldfine, M.D., Teaching Fellow in Psychiatry.
Sheldon Golub, M.D., Teaching Fellow in Psychiatry.
Jon E. Gudeman, M.D., Teaching Fellow in Psychiatry.
Bennett S. Gurian, M.D., Teaching Fellow in Psychiatry.
Jonathan A. Guttmacher, M.D., Teaching Fellow in Psychiatry.
George E. Hamilton, M.D., Teaching Fellow in Psychiatry.
Wassfy M. Hanna, M.B., Ch.B., Teaching Fellow in Psychiatry.
Lawrence M. Hartmann, M.D., Teaching Fellow in Psychiatry.
David W. Havens, M.D., Teaching Fellow in Psychiatry.
Joseph H. Herzberg, M.D., Teaching Fellow in Psychiatry.
Robert P. Hopkins, M.D., Teaching Fellow in Psychiatry.
Stephen D. Howard, M.D., Teaching Fellow in Psychiatry.
Jing Hsu, M.D., Teaching Fellow in Psychiatry.
Michael C. Hughes, M.D., Teaching Fellow in Psychiatry.
Judith N. Huizenga, M.D., Teaching Fellow in Psychiatry.
Ronald O. Hurston, M.D., Teaching Fellow in Psychiatry.
Leonard S. Jacobs, M.D., Teaching Fellow in Psychiatry.
Steven L. Jaffe, M.D., Teaching Fellow in Psychiatry.
Margaret A. Jolly, M.D., Teaching Fellow in Psychiatry.
Lloyd P. Kamins, M.D., Teaching Fellow in Psychiatry.
William W. Kates, M.D., Teaching Fellow in Psychiatry.
Jacob J. Katzow, M.D., Teaching Fellow in Psychiatry.
Martin J. Kelly, Jr., M.D., Teaching Fellow in Psychiatry.
Nasir A. Khan, M.B., B.S., Teaching Fellow in Psychiatry.
Edward J. Khantzian, M.D., Teaching Fellow in Psychiatry.
Dori Laub, M.D., Teaching Fellow in Psychiatry.
Kyu W. Lee, M.D., Teaching Fellow in Psychiatry.

Robert Leff, M.D., Teaching Fellow in Psychiatry.
Louis D. Levi, M.D., Teaching Fellow in Psychiatry.
Matthew E. Levine, M.D., Teaching Fellow in Psychiatry.
Robert P. Liberman, M.D., Teaching Fellow in Psychiatry.
Jerome J. Liss, M.D., Teaching Fellow in Psychiatry.
Peter B. Livingston, M.D., Teaching Fellow in Psychiatry.
Hugh J. Lurie, M.D., Teaching Fellow in Psychiatry.
Harvey E. Mazer, M.D., Teaching Fellow in Psychiatry.
James G. McAllister, 3rd, M.D., Teaching Fellow in Psychiatry (through August 31, 1966).
Robert W. McCarley, M.D., Teaching Fellow in Psychiatry.
Nancy J. McDonnell, M.D., Teaching Fellow in Psychiatry.
Hugh B. McNamee, M.B., Ch.B., Teaching Fellow in Psychiatry.
William J. Moran, M.D., Teaching Fellow in Psychiatry.
Andrew P. Morrison, M.D., Teaching Fellow in Psychiatry.
Lawrence B. Mutty, M.D., Teaching Fellow in Psychiatry.
Amos Nahor, M.D., Teaching Fellow in Psychiatry (through December 31, 1966).
Jeremy P. Nahum, M.D., Teaching Fellow in Psychiatry.
Michael H. Nelson, L.R.C.P., Teaching Fellow in Psychiatry.
Walter N. Pahnke, M.D., Ph.D., Teaching Fellow in Psychiatry.
Robert D. Patterson, M.D., Teaching Fellow in Psychiatry.
Michael S. Perlman, M.D., Teaching Fellow in Psychiatry.
Frederic J. Phillips, M.D., Teaching Fellow in Psychiatry.
Quentin R. Regestein, M.D., Teaching Fellow in Psychiatry.
Arthur E. Reider, M.D., Teaching Fellow in Psychiatry.
Donald L. Rife, M.D., Teaching Fellow in Psychiatry (through August 31, 1966).
Ethan S. Rofman, M.D., Teaching Fellow in Psychiatry.
James E. Sabin, M.D., Teaching Fellow in Psychiatry.
Carl Salzman, M.D., Teaching Fellow in Psychiatry.
Shera Samaraweera, M.B., B.S., D.P.M., Teaching Fellow in Psychiatry (through August 31, 1966).
Paul Schneller, M.D., Teaching Fellow in Psychiatry.
Henry E. Schniewind, M.D., Teaching Fellow in Psychiatry.

Robert W. Shapiro, M.D., Teaching Fellow in Psychiatry.
Robert H. Sharpley, M.D., Teaching Fellow in Psychiatry.
Michael A. Sperber, M.D., Teaching Fellow in Psychiatry (from December 15, 1966).
Mark L. Stiglitz, M.D., Teaching Fellow in Psychiatry.
William D. Strathmann, M.D., Teaching Fellow in Psychiatry.
Alfredo T. Suescum, M.D., Teaching Fellow in Psychiatry.
Ludwig S. Szymanski, M.D., Teaching Fellow in Psychiatry.
Chester W. Taylor, M.D., Teaching Fellow in Psychiatry.
Wen-Shing V. Tseng, B.M., Teaching Fellow in Psychiatry.
Jerry Wacks, M.D., Teaching Fellow in Psychiatry.
John S. Weltner, M.D., Teaching Fellow in Psychiatry.
Richard J. Wyatt, M.D., Teaching Fellow in Psychiatry.
Martin Yellen, M.D., Teaching Fellow in Psychiatry.
Sheldon D. Zigelbaum, D.M.D., M.D., Teaching Fellow in Psychiatry.

## *Required Courses*

Psychiatry. *First Year.* — Normal Growth and Development. The course will focus on the biological roots of behavior with particular attention to the phenomena of emotion and learning. Consideration of the progressive adaptation of the organism in interaction with the environment leads to an introduction to human personality development. This theme is developed further in the second year. The clinics will present patients exemplifying topic areas from the lecture series.

Psychiatry. *Second Year.* — The second year consists of nineteen lectures in abnormal growth and development to develop further concepts of psychological functioning. Emphasis shifts to the nature and genesis of abnormal psychological mechanisms manifested in symptoms and behavioral disturbances. Nine additional hours are given to introduce methods of history taking and examination of patients designed to understand more fully socio-emotional factors in illness. The course is designed to serve as a preparation for the Introduction to the Clinic and the Principal Clinical Year.

Psychiatry. *Introduction to the Clinic.* — Psychiatric interviewing

and case-taking are taught on the wards of the Beth Israel Hospital, Boston City Hospital, Massachusetts General Hospital, and Peter Bent Brigham Hospital by their psychiatric staffs. Lecture-demonstrations supplement this preparation for the subsequent clerkship.

PSYCHIATRY. *Principal Clinical Year.*—Each student serves as a clinical clerk for three weeks at the Massachusetts Mental Health Center, the Massachusetts General Hospital, or the McLean Hospital in conjunction with the Beth Israel Hospital. Work is with inpatients and outpatients, under supervision, and includes both short term and longer term contacts. The psychiatric problems of children and adolescents are discussed with staff members of the M.M.H.C., M.G.H., B.I.H., or C.H.M.C. During the medical, surgical, and pediatric clerkships at the B.I.H., B.C.H., M.G.H., P.B.B.H., and C.H.M.C., additional patients are studied under supervision one period each week. Emphasis is on the psychiatric problems of medical practice.

| FIRST YEAR | HOURS |
|---|---|
| PSYCHIATRY. Lectures and clinics. Drs. NEMIAH, ERVIN, and ASSOCIATES. | 12 |

| SECOND YEAR | |
|---|---|
| PSYCHIATRY. Lectures and section teaching. Dr. NEMIAH coordinator for course in Abnormal Growth and Development. In addition to nineteen lectures, each student attends three three-hour exercises as part of the course in physical diagnosis. | 19<br>9 |

INTRODUCTION TO THE CLINIC

PSYCHIATRY. Psychiatry services in the B.I.H., B.C.H., M.G.H., and P.B.B.H. Number of hours varies.

PRINCIPAL CLINICAL YEAR

PSYCHIATRY. Clinical Clerkship. Drs. EWALT, HAVENS, NEMIAH, VORENBERG, STANTON, GARDNER, FOX, P. SOLOMON, and ASSOCIATES at the M.M.H.C., M.G.H., B.I.H., Mc.L.H., C.H.M.C., P.B.B.H., B.C.H. In addition to the psychiatric clerkship students spend one period each week on psychiatric problems during clerkships in medicine, surgery, and pediatrics. 120

## *Fourth Year Elective Courses**

### BLOCK COURSES

501M. Adult Psychiatry. Dr. VORENBERG and ASSOCIATES.
502M. Child Psychiatry. Dr. ONESTI and ASSOCIATES.
503M. Medical Psychotherapy. Dr. ALTMAN and ASSOCIATES.
504M. Social Sciences in Medicine. Dr. ZINBERG and ASSOCIATES.
505M. Adult Psychiatry. Dr. P. SOLOMON and ASSOCIATES.
506M. Psychiatric Emergencies. Dr. P. SOLOMON and ASSOCIATES.
507M. Psychiatric Problems in Alcoholism. Dr. P. SOLOMON and ASSOCIATES.
508M. Psychiatry in Medical Practice. Dr. P. SOLOMON and ASSOCIATES.
509M. Child Psychiatry. Dr. G. E. GARDNER and ASSOCIATES.
510M. Child Psychiatry in Pediatric Practice. Dr. G. E. GARDNER and ASSOCIATES.
511M. Field Placements in Community Psychiatry. Dr. GRUNEBAUM and ASSOCIATES.
512M. Inpatient Service. Dr. NEMIAH.
513M. Psychiatric Clinic. Dr. SIFNEOS.
514M. Child Psychiatry. Dr. LAMONT.
515M. Acute Service. Dr. CHAFETZ.
516M. Alcohol Clinic. Dr. CHAFETZ.
517M. Community Mental Health Program. Dr. BRAGG.
518M. Adult Psychiatry. Drs. NEMIAH, SIFNEOS, WEISMAN, and CHAFETZ.
519M. Child Psychiatry. Dr. LAMONT.
520M. Acute Service. Dr. CHAFETZ.
521M. Alcohol Clinic. Dr. CHAFETZ.
522M. Adult Psychiatry. Dr. HAVENS and ASSOCIATES.
523M. Child Psychiatry. Dr. ROCHLIN and ASSOCIATES.
524M. Clinical Psychiatry. Drs. STANTON, HOWARD, LEVIN, WERMER, A. A. STONE, DEMARNEFFE, CHRIST, MUELLER, WASHBURN, and ASSOCIATES.
525M. Clinical Psychiatry. Drs. STANTON, HOWARD, LEVIN, WERMER, A. A. STONE, DEMARNEFFE, CHRIST, MUELLER, WASHBURN, and ASSOCIATES.

### BLOCK COURSES — RESEARCH

801. Clinical Psychiatric Research. Dr. HUNTINGTON.
802. General Psychiatric Research. Dr. P. SOLOMON and ASSOCIATES.
803. Research in Infant Development. Dr. P. H. WOLFF.
804. Experimental Analysis of Behavior and of Drugs Affecting Behavior in Laboratory Animals. Drs. DEWS, MORSE, and KELLEHER. (*Same course as Pharmacology 814.*)
805. Systematic Analysis of Psychotherapy. Drs. STANTON, SCHNITZER, VANDERPOL, R. M. WEINER, and COLEMAN.
806. Analysis of the Transmission of Signals through Ganglia of Simple

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

Nervous Systems (Statistical Communication and Systems Theory Approach). Dr. Hermann.

807. Ward Interaction of Schizophrenic Patients. Dr. Eldred and Associates.
808. Clinical Research — Inpatient Service. Dr. Nemiah.
809. Clinical Research — Outpatient Service. Dr. Sifneos.
810. Clinical Research — Consultation Service. Dr. Weisman.
811. Clinical Research — Acute Service. Dr. Chafetz.
812. Clinical Research — Alcohol Clinic. Dr. Chafetz.
813. Clinical Research — Child Psychiatry. Dr. Lamont.
814. Laboratory Work in Psychiatry. Drs. Ervin, Mendelson, Talland, Mello, Waugh, Quarton, and Mr. Lorch.
816. Clinical Psychiatric Research. Dr. Fox and Associates.
817. Research in the Physiology of Sleeping, Waking, and Dreaming. Dr. Hobson.

LONGITUDINAL COURSES

701. Use of Psychological Tests in General Hospital Practice. Drs. Huntington and B. Levine.
706M. Family in Relation to Illness and Hospitalization. Drs. Bell, Spiegel, and Associates.
707. Group Dynamics. Dr. Christ and Associates.
708. Individual Psychotherapy. Dr. Vanderpol and Associates.
709. General Psychopathology. Dr A. A. Stone and Associates.
710. Applied Geriatric Psychiatry. Dr. Berezin and Associates.
711. Behavioral Science Research. Dr. Talland and Associates.
712. Outpatient Psychotherapy. Dr. Sifneos.
713. Pre-school Check-up Program. Dr. Misch.
714. Techniques of Preventive Intervention. Dr. Herzan.
715. Dynamics of Group Processes in Medical Practice. Dr. Semrad and Associates.
716. Basic Principles of Psychotherapy. Dr. Semrad.
717. Problems in Psychiatry. Dr. Havens.
718. Basic Concepts of Dynamic Psychiatry. Dr. E. R. Zetzel.
721. Uses of Physiological Measurements in Psychological Research. Drs. Shapiro, Crider, and Mr. Tursky.
722. Outpatient Therapy. Drs. Stanton, Christ, A. A. Stone, Vanderpol, and Associates.
723. Practice of Medical Psychology. Dr. Lipsitt and Associates.
724. Psycho-Social Development — Adolescence through Aging. Dr. Zinberg and Associates.
725. Medicine in Society. Dr. Zinberg and Associates.
726. Incurable and Dying Patients — Emotional Issues for Patient and Doctor. Dr. Payne and Associates.
727. Consultative and Psychotherapeutic Approaches in Child Psychiatry. Dr. T. Frank and Associates.
728. Introduction to Community Psychiatry. Dr. Grunebaum and Associates.

730. Outpatient Clinical Clerkships. Drs. Christ, Shein, Mueller, and Associates.
731. Clinical Clerkship. Hospital Treatment and the Major Psychiatric Disorders. Drs. Stanton, P. M. Robinson, H. W. Williams, Jr., and Associates.

## Department of Radiology

Henry I. Kohn, Ph.D., M.D., Alvan T. and Viola D. Fuller-American Cancer Society Professor of Radiology.

Edward B. D. Neuhauser, M.D., Clinical Professor of Radiology, and Head of the Department.

Laurence L. Robbins, M.D., Clinical Professor of Radiology.

Florencio A. Hipona, M.D., Associate Clinical Professor of Radiology (from September 1, 1966).

Richard Schatzki, M.D., Associate Clinical Professor of Radiology.

Milford D. Schulz, M.D., Associate Clinical Professor of Radiology.

Morris Simon, M.B., Ch.B., Associate Clinical Professor of Radiology.

Martin H. Wittenborg, M.D., Associate Clinical Professor of Radiology.

S. James Adelstein, M.D., Ph.D., Philip H. Cook Fellow in Radiology, and Assistant Professor of Anatomy.

Jack R. Dreyfuss, M.D., Assistant Clinical Professor of Radiology.

Marjorie J. Lemay, M.D., Assistant Clinical Professor of Radiology.

Majic S. Potsaid, M.D., Assistant Clinical Professor of Radiology.

Edward W. Webster, Ph.D., Assistant Professor of Physics in the Department of Radiology.

Stanley M. Wyman, M.D., Assistant Clinical Professor of Radiology.

Lloyd E. Hawes, M.D., Lecturer on Radiology.

John E. Gary, M.D., Clinical Associate in Radiology.

George B. C. Harris, M.D., Clinical Associate in Radiology.

Martin B. Levene, M.D., Clinical Associate in Radiology.

Joseph H. Marks, M.D., Clinical Associate in Radiology.

Paul F. J. New, M.B., B.S., Clinical Associate in Radiology.

Keith R. Rabinov, M.D., Clinical Associate in Radiology.
Chiu-Chen Wang, M.D., Clinical Associate in Radiology.
Jerome H. Shapiro, M.D., Lecturer on Radiology.
Lucy F. Squire, M.D., Lecturer on Radiology.
Tugrul Pirnar, M.D., Research Associate in Radiology.
Boris P. Bushueff, M.D., Instructor in Radiology.
Robert E. Dinsmore, M.D., Instructor in Radiology.
Nathan T. Griscom, M.D., Instructor in Radiology.
Douglas H. Howry, M.D., Instructor in Radiology.
Murray L. Janower, M.D., Instructor in Radiology.
Naphtali Joffe, M.B., Ch.B., Instructor in Radiology.
Mirle A. Kellett, M.D., Instructor in Radiology.
John P. Lavender, M.B., Ch.B., Instructor in Radiology.
Alexander S. Macmillan, Jr., M.D., Instructor in Radiology.
James M. McNeill, M.D., Instructor in Radiology.
Robert A. Nebesar, M.D., Instructor in Radiology.
Henry P. Pendergrass, M.D., Instructor in Radiology.
James J. Pollard, M.D., Instructor in Radiology.
Norman L. Sadowsky, M.D., Instructor in Radiology.
John L. Sosman, M.D., Instructor in Radiology.
Melvin Tefft, M.D., Instructor in Radiology.
Frederick S. Tomchik, M.D., Instructor in Radiology.
Alfred L. Weber, M.D., Instructor in Radiology.
Wladimir Zezulin, M.D., Instructor in Radiology (from September 1, 1966).
Harry Bailey, M.B., Ch.B., Assistant in Radiology.
Stanley P. Bohrer, M.D., Assistant in Radiology.
Melvin E. Clouse, M.D., Assistant in Radiology.
Julian I. Gilliam, M.D., Assistant in Radiology.
Derek J. Goodman, M.B., B.S., Assistant in Radiology.
Patrick J. Haran, M.B., Ch.B., Assistant in Radiology (from September 1, 1966).
Francis A. Herzan, M.D., Assistant in Radiology.
Daniel Kaplan, M.D., Assistant in Radiology.
Donald A. Meier, M.D., Assistant in Radiology (from September 1, 1966).

Ronald J. Messer, M.D., Assistant in Radiology.
Richard G. O'Brien, M.D., Assistant in Radiology.
John F. O'Connor, M.D., Assistant in Radiology.
Richard C. Pfister, M.D., Assistant in Radiology.
Edward J. Potchen, M.D., Assistant in Radiology (resigned August 15, 1966).
Stefan C. Schatzki, M.D., Assistant in Radiology.
Hubert S. Sear, M.D., Assistant in Radiology.
John A. Twaddle, M.D., Assistant in Radiology.
Roland G. Ware, M.D., Assistant in Radiology.
George F. Zinninger, M.D., Assistant in Radiology.
William J. H. Caldicott, M.B., B.S., Teaching Fellow in Radiology (from January 1, 1967).
Kiyokazu J. Momose, M.D., C.M., Teaching Fellow in Radiology.
Jorgen Stovring, M.D., Teaching Fellow in Radiology.
Roy D. Strand, M.D., Philip H. Cook Fellow in Radiology.
George W. Taylor, M.D., Teaching Fellow in Radiology.
John A. Tomei, M.D., Teaching Fellow in Radiology (through December 31, 1966).
Dale E. Wenlund, M.D., Teaching Fellow in Radiology.
Robert H. Wilkinson, M.D., Teaching Fellow in Radiology.

## *Required Courses*

Radiology. *First Year.* — Radiological instruction during the first year comprises a series of presentations during the course in Anatomy, designed to introduce and apply the X-ray method as a means of studying gross internal anatomy in health and disease. The practical application of these methods is extended in the Saturday clinics.

Radiology. *Second Year.* — During the second semester of the second year, small group exercises and demonstrations are conducted in conjunction with the program of correlative teaching, with emphasis on the systematic approach to X-ray interpretation and the correlation of abnormal findings with gross pathology and pathophysiology.

Radiology. *Introduction to the Clinic* and *Principal Clinical Year.*

—Instruction is offered at the teaching hospitals through a series of lectures, clinics, and seminars.

## *Fourth Year Elective Courses* *

BLOCK COURSES

501M. General Radiology. Dr. M. SIMON and ASSOCIATES.
502M. General Radiology. Dr. M. SIMON and ASSOCIATES.
503M. General Pediatric Roentgen Diagnosis. Dr. NEUHAUSER and ASSOCIATES.
504M. Pediatric Radiotherapy. Dr. TEFFT.
505M. General Radiology. Dr. L. L. ROBBINS and ASSOCIATES.
506M. Radiation Therapy. Dr. SCHULZ and ASSOCIATES.
507M. General Radiology with Emphasis on Diagnostic Radiology. Dr. R. SCHATZKI and ASSOCIATES.
508M. Clinical Diagnosis, Clinical Radiotherapy, and Nuclear Medicine. Dr. HAWES and ASSOCIATES.
509M. Clinical Diagnosis. Dr. HAWES and ASSOCIATES.
510M. Clinical Radiotherapy, including Tutorial Instruction in Radiobiology. Drs. HAWES, ADELSTEIN, and ASSOCIATES.
511M. Nuclear Medicine. Drs. HAWES, POTCHEN, and ASSOCIATES.
512M. General Radiology. Dr. BUSHUEFF and ASSOCIATES.
513M. Radiology. Dr. SHAPIRO and ASSOCIATES.

LONGITUDINAL COURSES

701. Oncologic Radiobiology. Drs. KOHN, ADELSTEIN, and ASSOCIATES.
702. Diagnostic Roentgenology. Dr. L. L. ROBBINS.

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

## Department of Surgery

Robert E. Gross, M.D., D.Sc. (hon.), William E. Ladd Professor of Child Surgery, and Head of the Department at The Children's Hospital.

William V. McDermott, Jr., M.D., Professor of Surgery, and Head of the Department at the Boston City Hospital.

Francis D. Moore, M.D., S.D. (hon.), Moseley Professor of Surgery, Head of the Department at the Peter Bent Brigham Hospital (on Sabbatical leave January 15, 1967 through July 15, 1967).

Paul S. Russell, M.D., A.M. (hon.), John Homans Professor of Surgery, Head of the Department at the Massachusetts General Hospital, and Secretary to the Departments of Surgery.

William Silen, M.D., A.M. (hon.), Professor of Surgery at the Beth Israel Hospital, and Head of the Department at the Beth Israel Hospital.

W. Gerald Austen, M.D., Professor of Surgery.

Marshall K. Bartlett, M.D., Clinical Professor of Surgery.

Henry K. Beecher, M.D., M.D. (hon.), Henry Isaiah Dorr Professor of Research and Teaching in Anaesthetics and Anaesthesia.

George H. A. Clowes, Jr., M.D., Clinical Professor of Surgery.

Oliver Cope, M.D., Dr. (hon.), Professor of Surgery.

Jacob Fine, M.D., Professor of Surgery at the Beth Israel Hospital (retired August 31, 1966).

Dwight E. Harken, M.D., D.Sc. (hon.), Clinical Professor of Surgery.

J. Hartwell Harrison, M.D., A.M. (hon.), Elliott Carr Cutler Professor of Surgery.

Wyland F. Leadbetter, M.D., Clinical Professor of Surgery.

Donald D. Matson, M.D., Clinical Professor of Surgery.

Thomas B. Quigley, M.D., Clinical Professor of Surgery.

William H. Sweet, M.D., D.Sc., Professor of Surgery at the Massachusetts General Hospital.

Leroy D. Vandam, M.D., Clinical Professor of Anaesthesia.

Carl W. Walter, M.D., Clinical Professor of Surgery.

Richard Warren, M.D., Clinical Professor of Surgery.

Claude E. Welch, M.D., Clinical Professor of Surgery.

Hugo A. Krayenbuhl, M.D., Visiting Professor of Surgery (October 15, 1966 through November 15, 1966).

Thomas W. Botsford, M.D., Associate Clinical Professor of Surgery.

Chilton Crane, M.D., Associate Clinical Professor of Surgery.

Edward Hamlin, Jr., M.D., Associate Clinical Professor of Surgery.

George L. Nardi, M.D., Associate Clinical Professor of Surgery.

Melvin P. Osborne, M.D., Associate Clinical Professor of Surgery.

J. Gordon Scannell, M.D., Associate Clinical Professor of Surgery.

Robert M. Smith, M.D., Associate Clinical Professor of Anaesthesia.

Henry T. Ballantine, Jr., M.D., Assistant Clinical Professor of Surgery.

Henrik H. Bendixen, M.D., Assistant Clinical Professor of Anaesthesia.

William F. Bernhard, M.D., Assistant Clinical Professor of Surgery.

John R. Brooks, M.D., Assistant Clinical Professor of Surgery.

John F. Burke, M.D., Assistant Clinical Professor of Surgery.

Edward D. Frank, M.D., Assistant Professor of Surgery at the Beth Israel Hospital, and Tutor in Medical Science.

Howard A. Frank, M.D., Assistant Professor of Surgery at the Beth Israel Hospital, and Tutor in Surgery.

Hermes C. Grillo, M.D., Assistant Clinical Professor of Surgery.

Sylvester B. Kelley, M.D., Assistant Clinical Professor of Surgery.

Walter S. Kerr, Jr., M.D., Assistant Clinical Professor of Surgery.

Myron B. Laver, M.D., Assistant Clinical Professor of Anaesthesia.

Luther A. Longino, M.D., Assistant Clinical Professor of Surgery.

Donald W. MacCollum, M.D., Assistant Clinical Professor of Surgery.

Vernon H. Mark, M.D., Assistant Clinical Professor of Surgery.

Joseph E. Murray, M.D., Sc.D. (hon.), Assistant Clinical Professor of Surgery.

W. Bradford Patterson, M.D., Assistant Clinical Professor of Surgery.

William H. Pearlman, Ph.D., Assistant Professor of Biological Chemistry in the Department of Surgery.

John V. Pikula, M.D., Assistant Clinical Professor of Surgery.

John W. Raker, M.D., Assistant Clinical Professor of Surgery.

Alexander M. Rutenburg, M.D., Assistant Professor of Surgery at the Beth Israel Hospital, and Tutor in Medical Science.

Robert S. Shaw, M.D., Assistant Clinical Professor of Surgery.

Gene M. Smith, Ph.D., Assistant Professor in Psychology in Anaesthesia at the Massachusetts General Hospital.

George W. B. Starkey, M.D., Assistant Clinical Professor of Surgery.

Herbert S. Talbot, M.D., Assistant Clinical Professor of Surgery.

Donald P. Todd, M.D., Assistant Clinical Professor of Anaesthesia.

Walter R. Wegner, M.D., Assistant Clinical Professor of Surgery.

Richard E. Wilson, M.D., Assistant Professor of Surgery, and Tutor in Medical Science.

Henry J. Winn, Ph.D., Assistant Professor of Bacteriology and Immunology in the Department of Surgery at the Massachusetts General Hospital.

John Garcia, Ph.D., Lecturer on Psychology in the Department of Surgery.

Milton H. Alper, M.D., Clinical Associate in Anaesthesia.

Benjamin A. Barnes, M.D., Clinical Associate in Surgery.

Ernest M. Barsamian, M.D., Clinical Associate in Surgery.

Henry Brown, M.D., Clinical Associate in Surgery.

Bradford Cannon, M.D., Clinical Associate in Surgery.

Nathan P. Couch, M.D., Clinical Associate in Surgery.

Stanley Deutsch, Ph.D., M.D., Associate in Anesthesia.

Gordon A. Donaldson, M.D., Clinical Associate in Surgery.

Lawrence D. Egbert, M.D., Clinical Associate in Anaesthesia.

M. Judah Folkman, M.D., Associate in Surgery, and Tutor in Medical Science.

F. Thomas Gephart, M.D., Clinical Associate in Surgery.

Samuel Gilman, M.D., Clinical Associate in Anaesthesia.

Donald J. Glotzer, Ph.D., M.D., Clinical Associate in Surgery (from October 1, 1966).

Phillips Hallowell, M.D., Clinical Associate in Anaesthesia.

John Hedley-Whyte, M.B., Ch.B., Clinical Associate in Anaesthesia.

William H. Hendren, 3rd, M.D., Clinical Associate in Surgery.

Louis Hermanson, M.D., Clinical Associate in Surgery.

Charles E. Huggins, M.D., Clinical Associate in Surgery.

Raymond N. Kjellberg, M.D., Associate in Surgery at the Massachusetts General Hospital.

Guy W. Leadbetter, M.D., Clinical Associate in Surgery.

Charles G. Mixter, Jr., M.D., Clinical Associate in Surgery.

Anthony P. Monaco, M.D., Clinical Associate in Surgery, and Tutor in Medical Science.

John C. Norman, M.D., Associate in Surgery.

Ellison C. Pierce, Jr., M.D., Clinical Associate in Anaesthesia.

Henning Pontoppidan, M.D., Clinical Associate in Anaesthesia.

George S. Richardson, M.D., Clinical Associate in Surgery.

Chester B. Rosoff, M.D., Clinical Associate in Surgery, and Tutor in Medical Science.

Edwin W. Salzman, M.D., Clinical Associate in Surgery.

Samuel R. Schuster, M.D., Clinical Associate in Surgery.
John Shillito, Jr., M.D., Clinical Associate in Surgery.
Arnold Starr, M.D., Clinical Associate in Surgery.
Kenneth J. Welch, M.D., Clinical Associate in Surgery.
H. Brownell Wheeler, M.D., Clinical Associate in Surgery.
Earle W. Wilkins, Jr., M.D., Clinical Associate in Surgery.
John A. Williams, M.D., Associate in Surgery at the Beth Israel Hospital.
Francis M. Woods, M.D., Clinical Associate in Surgery.
Herbert D. Adams, M.D., Lecturer on Surgery.
George Austen, Jr., Lecturer on Surgery.
Edward A. Gaensler, M.D., Lecturer on Surgery (from December 1, 1966).
Cornelius E. Sedgwick, M.D., Lecturer on Surgery.
Erik Waino-Andersen, M.D., Visiting Lecturer on Anaesthesia.
Kenneth W. Warren, M.D., Lecturer on Surgery.
Adelbert Ames, 3rd., M.D., Research Associate in Biological Chemistry in the Department of Surgery.
James E. Anliker, Ph.D., Research Associate in Anaesthesia.
Philip A. Drinker, Ph.D., Research Associate in Physiology in the Department of Surgery.
Nathan Kaliss, Ph.D., Research Associate in Surgery (November 1, 1966 through April 30, 1967).
Ruth B. Kundsin, Sc.D., Research Associate in Bacteriology in the Department of Surgery.
Peter B. Lambert, M.B., Ch.B., Research Associate in Surgery.
David E. Leith, M.D., Research Associate in Anaesthesia (resigned August 31, 1966).
Padmakar P. Lele, M.D., Dr.Phil., Research Associate in Physiology in the Department of Surgery.
Carlo Palmerio, M.D., Research Associate in Surgery.
Asenath Petrie, Ph.D., Research Associate in Psychology in the Department of Surgery.
Daniel A. Pollen, M.D., Research Associate in Neurobiology in the Department of Surgery.
Selma H. Rutenburg, M.D., Research Associate in Surgery.

Farida M. Saad, Ph.D., Research Associate in Biological Chemistry in the Department of Surgery.

Robert C. Skarnes, Ph.D., Research Associate in Bacteriology and Immunology in the Department of Surgery.

Edgar E. Smith, Ph.D., Research Associate in Surgery.

Albert H. Soloway, Ph.D., Research Associate in Chemistry in the Department of Surgery.

Arthur L. Abrams, M.D., Instructor in Anaesthesia.

Hart Achenbach, M.D., Instructor in Surgery.

Frederick W. Ackroyd, M.D., Instructor in Surgery (resigned July 31, 1966).

John G. Adams, Jr., M.D., Instructor in Anaesthesia.

Menelaos A. Aliapoulias, M.D., Instructor in Surgery.

Norman W. Andrew, M.D., Instructor in Anaesthesia.

George E. Battit, M.D., Instructor in Anaesthesia.

Solomon Berg, M.D., Instructor in Surgery.

Alan G. Birtch, M.D., Instructor in Surgery, and Tutor in Medical Science.

Harrison Black, M.D., Instructor in Surgery.

Milton F. Brougham, M.D., Instructor in Surgery.

Hathorn P. Brown, M.D., Instructor in Surgery.

Mortimer J. Buckley, M.D., Instructor in Surgery.

John W. Chamberlain, M.D., Instructor in Surgery.

Cesare G. Coletta, M.D., Instructor in Anaesthesia.

John D. Constable, M.D., Instructor in Surgery.

Myriam R. D. Corthesy, M.D., Instructor in Anaesthesia (from October 1, 1966).

Dean Crocker, M.D., Instructor in Anaesthesia.

John M. Crowe, M.D., Instructor in Surgery.

Brian C. Dalton, M.D., Instructor in Anaesthesia.

Robert E. Desautels, M.D., Instructor in Surgery.

William S. Easton, M.D., Instructor in Anaesthesia.

Robert M. Filler, M.D., Instructor in Surgery.

Albert J. Finck, M.D., Instructor in Anaesthesia.

William F. Flynn, M.D., Instructor in Surgery.

Elwin E. Fraley, M.D., Instructor in Surgery. (resigned January 31, 1967).
Edward W. Friedman, M.D., Instructor in Surgery, and Tutor in Medical Science.
Joseph H. Galicich, Jr., M.D., Instructor in Surgery.
Philip G. Gallagher, M.D., Instructor in Surgery.
Raymond W. Gibbs, M.D., Instructor in Surgery.
Julius E. Goldblatt, M.D., Instructor in Surgery.
Robert M. Goldwyn, M.D., Instructor in Surgery.
Edward B. Gray, Jr., M.D., Instructor in Surgery.
Harold L. Greenberg, D.M.D., M.D., Instructor in Surgery.
Paul F. Gryska, M.D., Instructor in Surgery.
Eugene A. Guralnick, M.D., Instructor in Surgery.
Hannibal Hamlin, M.D., Instructor in Surgery.
Stephen J. Healey, M.D., Instructor in Surgery.
Zolman Helfand, D.M.D., M.D., Instructor in Surgery.
Carl S. Hoar, Jr., M.D., Instructor in Surgery.
Stephen J. Hoye, M.D., Instructor in Surgery.
Lee G. Kendall, M.D., Instructor in Surgery.
Benjamin J. Kripke, M.D., Instructor in Anaesthesia.
James A. Krisher, M.D., Instructor in Anaesthesia.
Lee V. Leak, Ph.D., Instructor in Surgery.
Feung B. Lee, M.D., Instructor in Surgery.
Richard H. Litner, M.D., Instructor in Surgery (from September 1, 1966).
Martin S. Litwin, M.D., Instructor in Surgery (resigned August 31, 1966).
Edward Lowenstein, M.D., Instructor in Anaesthesia.
Samuel Lowis, M.D., Instructor in Surgery.
Edward M. Mahoney, D.M.D., M.D., Instructor in Surgery.
David T. Mahony, M.D., Instructor in Surgery.
Ronald A. Malt, M.D., Instructor in Surgery.
David E. Marcello, Jr., D.M.D., M.D., Instructor in Surgery.
Phillip S. Marcus, M.D., Instructor in Anaesthesia.
Charles F. McKhann, M.D., Instructor in Surgery, and Tutor in Medical Science.

John B. McKittrick, M.D., Instructor in Surgery.
Bucknam McPeek, M.D., Instructor in Anaesthesia.
Keith Merrill, Jr., M.D., Instructor in Surgery.
Jost J. Michelsen, M.D., Instructor in Surgery.
Tassadduk H. Moghul, M.B., B.S., Instructor in Surgery.
Alfred P. Morgan, Jr., M.D., Instructor in Surgery.
Roger H. Morris, M.D., Instructor in Anaesthesia.
Daniel J. Mullane, M.D., Instructor in Surgery.
Louis H. Nason, M.D., Instructor in Surgery.
Robert A. Newton, M.D., Instructor in Surgery.
Edward T. O'Hara, M.D., Instructor in Surgery.
Robert G. Ojemann, M.D., Instructor in Surgery.
Leslie W. Ottinger, M.D., Instructor in Surgery.
Edward C. Parkhurst, M.D., Instructor in Surgery.
Alan D. Perlmutter, M.D., Instructor in Surgery.
Louis N. Pernokas, M.D., Instructor in Surgery.
William C. Quinby, Jr., M.D., Instructor in Surgery.
William S. Rachlin, M.D., Instructor in Surgery.
Grant V. Rodkey, M.D., Instructor in Surgery.
A. David Roth, M.D., Instructor in Surgery.
John L. Rowbotham, M.D., Instructor in Surgery.
Joseph F. Ruscio, M.D., Instructor in Anaesthesia.
Mario R. Salem, M.D., Instructor in Anaesthesia.
Bernard R. Sears, M.D., Instructor in Surgery.
Arnold L. Segel, M.D., Instructor in Surgery.
Talbot D. Seigne, M.B., Ch.B., Instructor in Anaesthesia.
Donald B. Shahon, M.D., Ph.D., Instructor in Surgery.
John J. Skillman, M.D., Instructor in Surgery.
Alan R. Spievack, M.D., Instructor in Surgery.
Albert M. Starr, M.D., Instructor in Surgery.
Howard I. Suby, M.D., Instructor in Surgery.
Warren J. Taylor, M.D., Instructor in Surgery.
Howard A. Trachtenberg, M.D., Instructor in Anaesthesia.
Barbara E. Waud, M.D., Instructor in Anaesthesia (from October 1, 1966).
Jess B. Weiss, M.D., Instructor in Anaesthesia.

Frank C. Wheelock, Jr., M.D., Instructor in Surgery.
Malvin F. White, D.M.D., M.D., Instructor in Surgery.
Lorande M. Woodruff, M.D., Instructor in Surgery.
Raleigh L. Wright, M.D., Instructor in Surgery.
Masao Yatsuhashi, M.D., Instructor in Surgery.
Gerald L. Zeitlin, M.B., Ch.B., Instructor in Anaesthesia.
John R. Algird, M.D., Assistant in Anaesthesia.
Richard C. Austin, M.D., Assistant in Surgery.
Edward P. Baker, Jr., M.D., Assistant in Surgery.
Glenn E. Behringer, M.D., Assistant in Surgery.
Harold Bengloff, M.D., Assistant in Surgery.
Ronald Birkenfeld, M.D., Assistant in Surgery.
Joan M. Brown, M.B., Ch.B., Assistant in Anaesthesia (through July 31, 1966).
Charles B. Burbank, M.D., Assistant in Surgery.
Leonard S. Bushnell, M.D., Assistant in Anaesthesia.
Edwin L. Carter, M.D., Assistant in Surgery.
Joseph W. Copel, M.D., Assistant in Surgery.
Ralph C. Darling, Jr., M.D., Assistant in Surgery.
Enrico F. DeMaio, M.D., Assistant in Surgery (from December 1, 1966).
Chester J. Dexter, M.D., Assistant in Surgery.
Robert F. Dine, M.D., Assistant in Surgery.
Joseph F. Dorsey, M.D., Assistant in Surgery.
Nancy J. Engeset (Van Der Molen), M.D., Assistant in Anaesthesia.
Angelo Eraklis, M.D., Assistant in Surgery.
Frank Franco, M.D., Assistant in Surgery.
Frank W. Garran, M.D., Assistant in Surgery.
Paul L. Frederick, M.D., Assistant in Surgery.
Bennie Geffin, M.B., Ch.B., Assistant in Anaesthesia.
Richard F. Gibbs, M.D., Assistant in Anaesthesia.
George H. Gifford, M.D., Assistant in Surgery (from January 1, 1967).
John A. Goodwin, D.A., Assistant in Anaesthesia.
Stanley K. Gordon, M.D., Assistant in Surgery.

Ernest Grable, M.D., Assistant in Surgery.
John A. Hakes, M.B., Ch.B., Assistant in Anaesthesia (from December 1, 1966).
Irad B. Hardy, Jr., M.D., Assistant in Surgery.
John M. Head, M.D., Assistant in Surgery.
Stephen E. Hedberg, M.D., Assistant in Surgery.
Dorothy K. Heerdegen, M.D., Assistant in Anaesthesia.
Guenther E. Herpfer, M.D., Assistant in Anaesthesia.
Hyman A. Hershman, M.D., Assistant in Surgery.
Clement A. Hiebert, M.D., Assistant in Surgery.
Lucius T. Hill, Jr., M.D., Assistant in Surgery.
Reidar Hoff, M.D., Assistant in Anaesthesia (from October 1, 1966).
Alfred T. Joseph, D.M.D., M.D., Assistant in Surgery.
Constantine I. Kostas, M.D., Assistant in Surgery.
Clinton N. Koufman, M.D., Assistant in Surgery.
Susanne J. Lamdin, M.D., Assistant in Anaesthesia.
Lucy Lee, M.D., Assistant in Anaesthesia.
Sabin S. Levenson, M.D., Assistant in Surgery.
Howard J. Lewenstein, M.D., Assistant in Surgery.
John B. Lloyd, M.D., Assistant in Surgery.
John Lynch, M.D., Assistant in Surgery.
Edward J. Mahoney, M.D., Assistant in Anaesthesia.
Rita A. Manzi, M.D., Assistant in Anaesthesia.
Jack M. Matloff, M.D., Assistant in Surgery.
Leo T. McCallum, M.D., Assistant in Surgery.
Eugene F. McDonough, Jr., M.D., Assistant in Surgery.
Carroll C. Miller, M.D., Assistant in Surgery.
John D. Murphy, M.D., Assistant in Anaesthesia.
Larry K. Page, M.D., Assistant in Surgery.
Anthony S. Patton, M.D., Assistant in Surgery.
Anne W. Phillips, M.D., Assistant in Surgery.
Marvin J. Powell, M.D., Assistant in Surgery.
Robert L. Replogle, M.D., Assistant in Surgery.
Francis X. Rockett, M.D., Assistant in Surgery.
William P. Rogers, Jr., M.D., Assistant in Surgery.

Leon Rosenfeld, M.D., Assistant in Surgery.
S. Peter Sarris, M.D., Assistant in Surgery.
N. Paul Schepis, M.D., Assistant in Anaesthesia.
Robert Shapiro, M.D., Assistant in Surgery.
Melvin I. Shoul, M.D., Assistant in Surgery.
Frederick A. Simeone, M.D., Assistant in Surgery (resigned July 31, 1966).
William L. Strickler, M.D., Assistant in Surgery.
Kunio Suwa, M.D., Assistant in Anaesthesia (through September 30, 1966).
Judith A. Tassie, M.B., B.S., Assistant in Anaesthesia.
Robin A. van der Molen, M.B., Ch.B., Assistant in Anaesthesia.
James C. Walker, M.D., Assistant in Surgery.
Philip H. Walker, M.D., Assistant in Surgery.
Sarita G. Walzer, M.D., Assistant in Anaesthesia.
Chiu-an Wang, M.D., Assistant in Surgery.
Dorothy A. Wescott, M.B., B.S., Assistant in Anaesthesia.
Harold A. Wilkinson, M.D., Ph.D., Assistant in Surgery (from September 1, 1966).
Lawrence I. Zaroff, M.D., Assistant in Surgery (resigned August 12, 1966).
Shakeab A. Alshabkhoun, M.D., Research Fellow in Surgery (through August 31, 1966).
Michael A. Bankole, M.B., B.S., Research Fellow in Surgery.
John H. Barsch, M.D., Research Fellow in Anaesthesia (through September 30, 1966).
Robert H. Bartlett, M.D., Research Fellow in Surgery.
Philip Belitsky, M.D., C.M., Research Fellow in Surgery.
Philippe F. Benda, M.D., Research Fellow in Surgery.
Erik J. Berg, M.D., Research Fellow in Surgery.
Paul R. Berry, M.B., Ch.B., Research Fellow in Anaesthesia.
George Blackburn, M.D., Research Fellow in Surgery (from December 1, 1966).
James L. Boak, M.B., Ch.B., Research Fellow in Surgery (from September 1, 1966).
Conrado C. Bondoc, M.D., Research Fellow in Surgery.

Alvaro Caro, M.D., Research Fellow in Surgery (through November 30, 1966).

Brian H. Casey, M.B., B.S., Research Fellow in Surgery (from September 15, 1966).

Aurelio Chaux, M.D., Research Fellow in Surgery (through December 31, 1966).

Aloysius J. Chen, M.D., Research Fellow in Surgery.

Toyoaki Chiba, M.D., Research Fellow in Surgery (through July 15, 1966).

John J. Collins, Jr., M.D., Research Fellow in Surgery (from September 1, 1966).

Arnold G. Coran, M.D., Research Fellow in Surgery.

Victor H. Covelli, M.D., Research Fellow in Surgery.

Giuliano Daddi, M.D., Research Fellow in Surgery (from January 1, 1967).

Rifaat K. Dagher, M.D., Research Fellow in Surgery (from September 1, 1966).

Allen L. Davies, M.D., Research Fellow in Surgery.

Arnold G. Diethelm, M.D., Research Fellow in Surgery.

Jean-Michel Dubernard, M.D., Research Fellow in Surgery (resigned February 28, 1967).

Michel A. Duvelleroy, M.D., Research Fellow in Anaesthesia.

Richard J. Elkort, M.D., Research Fellow in Surgery (from September 1, 1966).

W. Keith Eltringham, M.B., Ch.B., Research Fellow in Surgery.

Erik Eyskens, M.D., Research Fellow in Surgery (through August 31, 1966).

Joan W. Flacke, M.D., Research Fellow in Anaesthesia.

Chester J. Flynn, M.D., Research Fellow in Anaesthesia (from September 1, 1966).

Miles Fox, M.B., Ch.B., Research Fellow in Surgery (from August 1, 1966).

Jean L. Gueriguian, M.D., Research Fellow in Biological Chemistry in the Department of Surgery.

James R. W. Gumpert, M.B., Ch.B., Research Fellow in Surgery.

Hans-Joachim Halbfass, M.D., Research Fellow in Surgery (resigned August 31, 1966).

Felix H. Harder, M.D., Research Fellow in Surgery.

James M. Hartsuck, M.D., Research Fellow in Surgery.

Hiroshi Hatanaka, M.D., Research Fellow in Surgery.

Hartmut B. Heitmann, M.D., Research Fellow in Anaesthesia (through March 31, 1967).

Eduard Hradec, M.D., Research Fellow in Surgery (through September 30, 1966).

Mohammad A. Ilahi, M.B., B.S., Research Fellow in Surgery (from February 1, 1967).

Michel Jeannet, M.D., Research Fellow in Surgery.

Mark E. Jenny, M.D., Research Fellow in Surgery.

Olga Jonasson, M.D., Research Fellow in Surgery (through July 31, 1966).

Eduardo R. Juca, M.D., Research Fellow in Surgery (through March 31, 1967).

Paul C. A. Kinnaert, M.D., Research Fellow in Surgery (through December 31, 1966).

Yasushi Kojima, M.D., Research Fellow in Surgery (from September 1, 1966).

Paul L. Kornblith, M.D., Research Fellow in Surgery.

Jean-Pierre Lambilliotte, M.D., Research Fellow in Surgery (from October 1, 1966).

Frederick C. Lane, M.D., Research Fellow in Surgery.

Allyn G. May, M.D., Research Fellow in Surgery.

Clifton K. Meador, M.D., Research Fellow in Surgery (through August 31, 1966).

William M. Mee, M.B., B.S., Research Fellow in Surgery (through December 15, 1966).

Andrzej H. Michalski, M.D., Research Fellow in Surgery.

Heitaro Mogami, M.D., Ph.D., Research Fellow in Surgery (through September 15, 1966).

Takesada Mori, M.D., Research Fellow in Surgery (from August 1, 1966).

Mary J. Morris, M.B., B.S., Research Fellow in Anaesthesia (resigned August 26, 1966).

Peter J. Morris, M.B., B.S., Research Fellow in Surgery (resigned January 31, 1967).

Andrew M. Munster, M.B., B.S., Research Fellow in Surgery (from September 1, 1966).

Samuel D. Nelson, M.B., Ch.B., Research Fellow in Surgery (resigned January 31, 1967).

Hiromichi Ono, M.D., Research Fellow in Surgery (from November 1, 1966).

Wilbert M. Orr, M.B., Ch.B., Research Fellow in Surgery.

James R. Pluth, M.D., Research Fellow in Surgery (through December 31, 1966).

Graham C. Priestley, M.D., Research Fellow in Surgery (from October 1, 1966).

Maruf A. Razzuk, M.D., Research Fellow in Surgery (through August 31, 1966).

Max Rendall, M.B., Ch.B., Research Fellow in Surgery (from January 1, 1967).

Juan E. Roda, M.B., Ch.B., Research Fellow in Surgery.

Sigurd Rosenkaimer, M.D., Research Fellow in Anaesthesia (from January 1, 1967).

Joseph W. Rubin, M.D., Research Fellow in Surgery (from December 1, 1966).

Yash Vir Sachdev, M.B., B.S., Research Fellow in Surgery (October 1, 1966 through March 31, 1967).

Edward C. Saltzstein, M.D., Research Fellow in Surgery (September 15, 1966 through December 17, 1966).

Anthony P. Scapicchio, M.D., Research Fellow in Surgery (from July 15, 1966).

Rolf K. Schroder, M.D., Research Fellow in Surgery.

Akira Shintani, M.D., Research Fellow in Surgery (from November 1, 1966).

Jack S. Sizer, M.D., Research Fellow in Surgery.

Arnold Sladen, M.B., Research Fellow in Anaesthesia (from January 1, 1967).

David C. Smith, Ph.D., Research Fellow in Surgery (through October 31, 1966).

Kunijuki Someda, M.D., Research Fellow in Surgery (from November 1, 1966).

Frank P. Stuart, M.D., Research Fellow in Surgery (through August 31, 1966).

Katsumi Suematsu, M.D., Research Fellow in Surgery.

Kozo Suma, M.D., Research Fellow in Surgery.

Masami Suwa, M.D., Ph.D., Research Fellow in Surgery.

Benedictus A. van der Werf, M.D., Research Fellow in Surgery.

Charles G. Watson, M.D., Research Fellow in Surgery.

Harold S. Winsey, M.B., B.S., Research Fellow in Surgery.

Peter M. Winter, M.D., Research Fellow in Anaesthesia (through February 28, 1967).

Francis G. Wolfort, M.D., Research Fellow in Surgery.

Zenya Yamazaki, M.D., Research Fellow in Surgery (from September 1, 1966).

Shinji Yuasa, M.D., Ph.D., Research Fellow in Surgery (through April 30, 1967).

Robert M. Zollinger, Jr., M.D., Research Fellow in Surgery (through March 31, 1967).

Walter Zuckerman, M.D., Research Fellow in Surgery.

Falke W. Zuschneid, M.D., Research Fellow in Surgery (from December 1, 1966).

Raphael Adar, M.B., Ch.B., Teaching Fellow in Surgery.

Jerald S. Brodkey, M.D., Teaching Fellow in Surgery.

Bennie Bub, M.B., Ch.B., Teaching Fellow in Surgery (through December 31, 1966).

Howard F. Carpenter, Jr., M.D., Teaching Fellow in Surgery (September 1, 1966 through October 31, 1966).

Willard M. Daggett, M.D., Teaching Fellow in Surgery (from January 1, 1967).

Yechiel D. Heilbronn, M.D., Teaching Fellow in Surgery (through December 31, 1966).

Edward L. Katz, M.D., Teaching Fellow in Surgery.

Raphael H. Levey, M.D., Teaching Fellow in Surgery (from January 1, 1967).

Roger V. Moseley, M.D., Teaching Fellow in Surgery.

Eldred D. Mundth, M.D., Teaching Fellow in Surgery.

Franklin S. Nelson, M.D., Teaching Fellow in Surgery (November 1, 1966 through December 31, 1966).

Joseph T. Ostroski, M.D., Teaching Fellow in Surgery (January 1, 1967 through February 28, 1967).

Richard M. Parker, M.D., Teaching Fellow in Surgery (from January 1, 1967).

Louis F. Plzak, M.D., Arthur Tracy Cabot Teaching Fellow in Surgery.

Geoffrey A. Talbot, M.D., Teaching Fellow in Surgery (through December 31, 1966).

David S. Trump, M.D., Teaching Fellow in Surgery.

## *Required Courses*

Instruction will be given by amphitheatre clinics, lectures, and conferences, together with section teaching in the wards and out-patient departments of the hospitals and in the surgical research laboratories.

Surgery. *Second Year.* — The course is designed to correlate preclinical sciences with the basic principles underlying the surgical management of injury and disease. The Department of Surgery joins with the Department of Medicine in a series of exercises in physical diagnosis and laboratory medicine to offer unified instruction in case taking. Practical exercises are offered that introduce the student to basic surgical techniques.

Surgery. *Introduction to the Clinic.* — This new program, conducted on a twelve-week basis is considered as a unit, with approximately one third of the total time devoted to surgical instruction, one third to internal medicine, and one third to the various special interests in both medicine and surgery. During the course of surgery, intensive instruction in surgical disease, surgical pathology, surgical treatment and surgical techniques is given at the B.I.H., B.C.H., M.G.H., and P.B.B.H.

Surgery. *Principal Clinical Year.* — In the new curriculum a twelve month clinical year is divided into four three month periods. For

each student one of these periods will be devoted to surgery at the Beth Israel Hospital, the Boston City Hospital, the Massachusetts General Hospital or the Peter Bent Brigham Hospital. Certain surgical specialty interests are included in the surgery quadrimester, such as Urology, Anaesthesia and Neurosurgery as well as Outpatient and Emergency Ward experience. Other surgical interests and special areas such as Orthopedics, Otolaryngology and Ophthalmology are included in another quadrimester.

| SECOND YEAR | HOURS |
|---|---|
| Section work, case taking, lectures, and demonstrations on the physical diagnosis of surgical disease in conjunction with the Department of Medicine. Drs. Silen, McDermott, Moore, Russell, and Associates. B.I.H., B.C.H., M.G.H., and P.B.B.H. Each student has twenty-four exercises. | 84 |

| INTRODUCTION TO THE CLINIC | |
|---|---|
| Exercises in sections in the wards and outpatient departments at the B.I.H., B.C.H., M.G.H., and P.B.B.H. | 121 |

| PRINCIPAL CLINICAL YEAR | |
|---|---|
| Clinical Clerkship: B.I.H. (Dr. Silen and Associates); B.C.H. (Dr. McDermott and Associates); M.G.H. (Dr. Russell and Associates); P.B.B.H. (Dr. Moore and Associates). | 480 |

## *Fourth Year Elective Courses* *

A wide range of special opportunities is made available in the various surgical departments for additional clinical experience and for participation in programs of laboratory investigation related to current surgical problems (see below).

BLOCK COURSES

501M. Clinical Surgery. Dr. McDermott and Associates.
502M. Children's Surgery. Dr. Gross and Associates. (*Same course as Pediatrics 527M.*)

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

504M. Clinical Application of Surgical Biology. Dr. Russell and Associates.
505M. Emergency Care — Surgical and Medical. Drs. Wilkins and Bird.
506M. Infectious Disease: Surgical Infection. Dr. Burke and Associates.
507M. Endocrinology with Special Reference to the Ovary. Drs. Ulfelder, G. S. Richardson, McArthur, and Scully. (*Same course as Obstetrics and Gynecology 513M.*)
508M. Pulmonary I. Chronic Chest Disease: Medical and Surgical Aspects. Drs. Scannell and Bird.
509M. Pulmonary II. Management of Acute and Chronic Respiratory Insufficiency. Dr. Pontoppidan and Associates.
510M. Cardiovascular Physiology. Dr. W. G. Austen.
511M. Cardiac Surgery. Drs. Scannell and W. G. Austen.
512M. Management of the Patient for Anesthesia and Surgery. Drs. Beecher, Todd, and Associates.
513M. Pediatric Surgery. Dr. Hendren. (*Same course as Pediatrics 525M.*)
514M. Advanced Surgery. Dr. R. Warren and Associates.
515M. Plastic and Transplantation Surgery. Dr. J. E. Murray and Associates.
516M. General and Emergency Surgery. Dr. F. D. Moore and Staff.
517M. Urology. Dr. J. H. Harrison and Associates.
518M. Tumors and Cancer. Drs. Botsford, R. E. Wilson and Associates.
519M. Neurosurgery. Dr. Matson and Associates.
520M. Peripheral Vascular Surgery. Dr. Crane and Associates.
521M. Anesthesia. Dr. Vandam and Associates.
522M. Cardiac Surgery. Dr. Harken and Associates.
523M. Spinal Cord Injury. Dr. H. S. Talbot and Associates.
524M. Comprehensive Gynecology. Dr. S. Sturgis. (*Same course as Obstetrics and Gynecology 511M.*)
525M. Advanced Clinical Surgery. Dr. Silen and Associates.
526M. Thoracic Surgery. Dr. H. A. Frank.
527M. Peripheral Vascular Surgery. Dr. E. D. Frank.
528M. Clinical Studies of Antibiotic Therapy. Dr. A. M. Rutenberg.
529M. Neurosurgery. Dr. Sweet and Associates.
530M. Clinical Gastrointestinal Disease. Dr. J. R. Brooks.
531M. Ambulatory Surgery. Drs. Behringer, Wilkins, and Associates.
532M. Plastic and Reconstructive Surgery. Drs. Cannon and Constable.
533M. Clinical Surgery. Dr. Rodkey.

BLOCK COURSES — RESEARCH

801. Research Experience. Drs. McDermott, Mark, Osborne, Pikula, M. Brown, H. Brown, and Associates.
802. Surgical Biology — Research Methods. Dr. Russell and Associates.
803. Cardio-Respiratory Physiology. Dr. Bendixen and Associates.
804. Psychopharmacology. Drs. Beecher, G. M. Smith, and Anliker.
805. Blood Gas and Acid-Base Chemistry. Dr. Laver and Associates.
806. Surgical Study and Care; Surgical Metabolism. Dr. F. D. Moore.
807. Surgical Investigation. Dr. J. E. Murray.

808. Surgical Investigation. Dr. R. E. Wilson.
809. Surgical Investigation. Dr. W. H. Pearlman. (*Same course as Biological Chemistry 826*).
810. Surgical Investigation. Dr. Couch.
811. Surgical Investigation. Dr. A. P. Morgan.
812. Surgical Investigation. Dr. Walter.
813. Surgical Investigation. Dr. Vandam.
814. Surgical Investigation. Dr. H. B. Wheeler.
815. Pathophysiology of Liver and Gastrointestinal Disease. Drs. Davidson, McDermott, Zamcheck, and Associates. (*Same course as Medicine 816 and Pathology 806*).
816. Surgical Research. Dr. Silen.
817. Surgical Research. Dr. H. A. Frank.
818. Surgical Research. Dr. E. D. Frank.
819. Surgical Research. Dr. A. M. Rutenburg.
820. Surgical Research. Dr. Rosoff.
821. Surgical Research. Dr. J. A. Williams.
822. Surgical Research. Dr. Lambert.
823. Surgical Research. Dr. Ashford.
824. Surgical Research. Dr. E. E. Smith.
825. Basic Sciences of Neurosurgery. Drs. Sweet, Ames, Ballantine, Brownell, Bullivant, Ervin, Garcia, Kjellberg, Lele, Ojemann, Soloway, Wright, and Associates.
826. Surgical Biology: Organ Regeneration. Dr. Malt.
827. Surgical Investigation. Dr. McKhann.
828. Research in Wound Healing. Dr. Grillo.
829. Surgical Research. Dr. Skillman.
830. Cancer Research Using Tissue and Organ Culture. Dr. Folkman.

LONGITUDINAL COURSES

703. Clinical and Investigative Gastroenterology. Dr. Osborne and Associates, Dr. Zamchek and Associates. (*Same course as Medicine 715.*)
704. Pediatric Urologic Problems. Dr. Perlmutter. (*Same course as Pediatrics 701.*)
706. Trauma. Drs. Moore, W. T. Green, Banks, Quigley, Matson, Harrison, Vandam, and Morgan. (*Same course as Orthopedic Surgery 701.*)
707. Surgical Biology. Dr. Russell and Associates.

## Interdepartmental and Special Courses

### *Fourth Year Elective Courses* *

BLOCK COURSES

602M. Biology of Malignant Disease. Drs. Raker, Farber, Lisco, Zamecnik, Hiatt, Kohn, and Associates.

604M. Ambulatory Medicine. Drs. Stoeckle, J. E. Connelly, Sidel, Duhl, and Knowles.

605M. Experimental Biology of Oncolytic and Immunosuppressive Agents. Dr. Farber and Associates.

LONGITUDINAL COURSES

751. Clinical Pharmacology of Oncolytic and Immunosuppressive Agents. Drs. Farber, Hall, and Associates.

752. Metabolic Consequences of Neoplasia in Man. Drs. Hall, Thorn, Farber, and Associates.

753M. Family Health Care Program. Drs. Alpert, Bullard, Sidel, Robbins, and Associates.

754. Clinical Pharmacology. Dr. Hall and Associates.

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

## Tropical Public Health

This course is given by the following members of the Faculty of the Harvard School of Public Health.

Thomas H. Weller, M.D., LL.D., Richard Pearson Strong Professor of Tropical Public Health, and Head of the Department.

Franklin A. Neva, M.D., John La Porte Given Professor of Tropical Public Health.

Eli Chernin, S.D., Associate Professor of Tropical Public Health.

Thomas E. Frothingham, M.D., Associate Professor of Tropical Public Health.

Edward H. Michelson, Ph.D., Assistant Professor of Tropical Public Health.

Steve C. Pan, M.D., M.P.H., Assistant Professor of Tropical Public Health.

Andrew Spielman, S.D., Assistant Professor of Tropical Public Health.

### *Required Course*

Parasitology A. *Second Year.* — The important helminth and protozoan parasites of man are considered with reference to their geographic distribution, identification, mode of transmission, pathogenesis, immune reactions and methods for prevention and control. Clinical aspects and chemotherapy of parasitic diseases are discussed. Emphasis is given to methods of laboratory diagnosis.

| SECOND YEAR | HOURS |
|---|---|
| Lectures, demonstrations, and laboratory work. Dr. Weller and Staff. Monday, Wednesday, and Friday afternoons, January and February | 41 |

### *Elective and Voluntary Courses*

Courses offered by the Department of Tropical Public Health in the School of Public Health are open, as electives, to medical students. The research facilities of the Department are available for elective work by qualified students, and opportunities for experience in tropical areas may be arranged. (See also page 277).

## School of Public Health

The courses listed below are given by members of the Faculty of the School of Public Health and are offered as elective courses to members of the fourth year class of the Medical School.

### *Fourth Year Elective Courses**

BLOCK COURSES — RESEARCH

801. Laboratory Research on Agents and Animal Hosts of Infectious Diseases. Dr. Weller and Associates.
802. Field Training in the Tropics. Drs. Weller and Frothingham.
803. Respiratory and Environmental Physiology. Drs. Whittenberger, Mead, and Associates.
804. Research in Epidemiology. Dr. MacMahon.

LONGITUDINAL COURSES

701. Statistical Methods in Research. Drs. Reed and Worcester. (*Same course as Biostatistics 2 c,d., S.P.H.*)
702. Epidemiology of Non-Infectious Disease. Dr. MacMahon. (*Same course as Epidemiology 2 c,d., S.P.H.*)
703. Human Heredity. Dr. Hutchinson. (*Same course as Epidemiology 4 c,d., S.P.H.*)
704. Current Research in Microbiology. Dr. Snyder. (*Same course as Microbiology 2d, S.P.H.*)
705. Public Health Laboratory Procedures. Dr. Murray and Associates. (*Same course as Microbiology 11c, S.P.H.*)
706. Rickettsial and Viral Diseases of Public Health Importance. Dr. Chang and Associates. (*Same course as Microbiology 13d, S.P.H.*)
707. Special Topics in Respiratory Physiology. Dr. Mead and Associates. (*Same course as Physiology 4d, S.P.H.*)
708. Radiation Biology. Dr. Little. (*Same course as Physiology 5c,d, S.P.H*).
709. Problems in Tropical Health. Dr. Weller and Guest Lecturers. (*Same course as Tropical Public Health 3d, S.P.H.*)
710. Laboratory Technics in Parasitology. Dr. Pan. (*Same course as Tropical Public Health 7c, S.P.H.*)
711. Introduction to Molluscs of Public Health Importance. Dr. Michelson. (*Same course as Tropical Public Health 8d, S.P.H.*)

* See *A Schedule of Fourth Year Elective Courses 1966–1967* for additional information.

712. Introduction to Medical Entomology. Dr. SPIELMAN. (*Same course as Tropical Public Health 9d, S.P.H.*)
713. Clinical and Pathologic Features of Tropical Diseases. Drs. NEVA and VON LICHTENBERG. (*Same course as Tropical Public Health 10c, S.P.H.*)
714. Tuberculosis. Dr. D. KOCH-WESER and Miss CAMPBELL. (*Same course as Microbiology and Tropical Public Health 40c, S.P.H.*)
715. Nutritional Aspects of Human Disease. Dr. STARE and STAFF. (*Same course as Nutrition 40c,d, S.P.H.*)

# DEGREES CONFERRED

On June 16, 1966, One Hundred Forty-one Degrees were Conferred as Follows:

## *M.D.*

Carlton Manville Akins, a.b. 1962.
Eugene Leonard Appel, b.m.e. (*Cornell Univ.*) 1962.
Abraham Aronow, s.b. (*Massachusetts Inst. of Technology*) 1962, b.med.sci. (*Dartmouth Coll.*) 1964.
Dennis Jerry Bauman, a.b. (*Williams Coll.*) 1962.
Russell Sloan Bell, a.b. (*Princeton Univ.*) 1961.
David Benjamin Bergman, a.b. (*Dartmouth Coll.*) 1962, b.med.sci. (*ibid.*) 1964.
Jane Elizabeth Bradley, a.b. (*Bryn Mawr Coll.*) 1962.
Richard Frank Branda, s.b. (*Univ. of Wisconsin*) 1962.
Clara Jane Breeden, a.b. (*Stanford Univ.*) 1962.
Bruce Jeffrey Brener, a.b. (*Yale Univ.*) 1962.
Stephen Morris Brown, a.b. (*Princeton Univ.*) 1961.
Jack Calvin Bunn, a.b. (*Duke Univ.*) 1959.
William Michael Carleton, a.b. (*Yale Univ.*) 1962.
Brian Catlin, a.b. 1961, b.med.sci. (*Dartmouth Coll.*) 1964.
Roger Lawton Christian, a.b. (*Middlebury Coll.*) 1961, b.med.sci. (*Dartmouth Coll.*) 1963.
Robert James Cihak, a.b. (*Univ. of Notre Dame*) 1962.
Roger Wells Clapp, a.b. (*Dartmouth Coll.*) 1963, b.med.sci. (*ibid.*) 1964.
Gerald Byer Colman, s.b. (*Tufts Univ.*) 1962, b.med.sci. (*Dartmouth Coll.*) 1964.
Richard Nathan Edelson, a.b. (*Dartmouth Coll.*) 1963, b.med.sci. (*ibid.*) 1964.
Kenneth Herbert Falchuk, a.b. (*Dartmouth Coll.*) 1962, b.med.sci. (*ibid.*) 1963.
John Vincent Federico, a.b. 1962, b.med.sci. (*Dartmouth Coll.*) 1964.
Frederick James Finseth, a.b. (*Stanford Univ.*) 1962.
Robert Hillman Fletcher, a.b. (*Wesleyan Univ.*) 1962.
Suzanne Estelle Wright Fletcher, a.b. (*Swarthmore Coll.*) 1962.

Howard James Fox, a.b. (*Dartmouth Coll.*) 1963, b.med.sci. (*ibid.*) 1964.

Ronald Barton Garren, a.b. (*Dartmouth Coll.*) 1963, b.med.sci. (*ibid.*) 1964.

Thomas Clement Gettelfinger, s.b. (*Univ. of Notre Dame*) 1962.

David Pollock Gilmour, s.b. (*Davidson Coll.*) 1962.

Jonathan Glass, s.b. (*Massachusetts Inst. of Technology*) 1962.

James Harold Gordon, a.b. (*Williams Coll.*) 1962.

Jeffrey Arnold Gottlieb, a.b. (*Amherst Coll.*) 1962.

Timothy Edward Guiney, s.b. (*Boston Coll.*) 1961.

Richard Jackson Hannah, a.b. (*Dartmouth Coll.*) 1962.

George Lynn Hardman, a.b. 1962.

Ned Richard Harley, a.b. (*Dartmouth Coll.*) 1963, b.med.sci. (*ibid.*) 1964.

Harold Berton Hawkins, b.med.sci. (*Dartmouth Coll.*) 1964.

Victor Rostislav Hrehorovich, a.b. 1962.

Edward Francis Xavier Hughes, a.b. (*Amherst Coll.*) 1962.

Frederic William Ilfeld, Jr., a.b. (*Yale Univ.*) 1962.

Edward Ellis Jacobs, Jr., a.b. (*Princeton Univ.*) 1962.

Herbert Clement Jurgeleit, a.b. (*Yale Univ.*) 1962.

Richard Harvey Kaldor, s.b. in med. (*Univ. of North Dakota*) 1964.

Jay Henry Kaufman, a.b. (*Princeton Univ.*) 1962.

Richard Emil Knab, a.b. (*Coll. of the Holy Cross*) 1962, b.med.sci. (*Dartmouth Coll.*) 1964.

Herbert John Koops, s.b. (*U.S. Military Academy*) 1957.

James Mark Krainin, a.b. 1962.

David Alan Krant, a.b. 1962.

Joan Marie Leary, a.b. (*Mount Holyoke Coll.*) 1962.

Melvin David Levine, a.b. (*Brown Univ.*) 1961.

Norman Steven Levine, a.b. (*Princeton Univ.*) 1962.

Steven Ralph Levisohn, a.b. 1962.

Donald Earl Loew, a.b. (*Brown Univ.*) 1959, b.med.sci. (*Dartmouth Coll.*) 1964.

John Marten Ludden, a.b. 1962.

John Eugene McGillicuddy, s.b. (*Coll. of the Holy Cross*) 1962, b.med.sci. (*Dartmouth Coll.*) 1964.

Thomas Kevin McInerny, a.b. (*Dartmouth Coll.*) 1963, b.med.sci. (*ibid.*) 1964.

Lyle Joseph Micheli, a.b. 1962.

Roberta Mohit, a.b. (*Cornell Univ.*) 1962.
Hooshang Nasr, a.b. (*Yale Univ.*) 1962.
George Duane Olsen, a.b. (*Dartmouth Coll.*) 1962, b.med.sci. (*ibid.*) 1964.
Robert Leo Owen, a.b. (*Univ. of Oklahoma*) 1962.
Douglas DeFrees Payne, a.b., 1962.
Anne Louise Rassiga Pidot, a.b. (*Bryn Mawr Coll.*) 1962.
Michael Boehmer Pine, a.b. (*Brandeis Univ.*) 1962.
Robert Donald Pipkin, s.b. in chem. (*Regis Coll.*) 1962, a.b. (*ibid.*) 1962.
Thomas Allen Poole, a.b. (*Univ. of Pennsylvania*) 1962.
Elliot David Prager, a.b. (*Dartmouth Coll.*) 1962, b.med.sci. (*ibid.*) 1964.
Jon Michael Reckler, a.b. 1962.
Michael Allan Rie, a.b. (*Dartmouth Coll.*) 1963, b.med.sci. (*ibid.*) 1964.
John Louis Roglieri, a.b. (*Lehigh Univ.*) 1960, s.b. in ch.e. (*ibid.*) 1960.
Logan Herbert Roots, a.b. (*Hamilton Coll.*) 1961.
Richard Bernard Rothenberg, a.b. (*Columbia Univ.*) 1962.
David Edward Scharff, a.b. (*Yale Univ.*) 1962.
Joseph Francis Scholand, a.b. (*St. John Fisher Coll.*) 1962.
John Williams Schott, a.b. (*Johns Hopkins Univ.*) 1962.
William Upjohn Shipley, a.b. (*Yale Univ.*) 1962.
Jay Barry Shumaker, a.b. (*Dartmouth Coll.*) 1963, b.med.sci. (*ibid.*) 1964.
Robert Charles Siegel, a.b. (*Princeton Univ.*) 1962.
Robert Lewis Sigman, a.b. (*Hobart Coll.*) 1962, b.med.sci. (*Dartmouth Coll.*) 1964.
Richard Wilbur Smith, a.b. 1962.
John Eric Stevenson, a.b. (*St. Olaf Coll.*) 1962.
Steven Roger Strong, s.b. (*Union Coll.*) 1962.
Phillip George Stubblefield, a.b. 1962.
Andrew Suian On Sun, s.b. (*Univ. of California*) 1961.
Ralph Coburn Sweetland, a.b. 1962.
Chester Parker Swett, Jr., s.b. (*Denison Univ.*) 1961.
Paul Torop, a.b. (*Yale Univ.*) 1962.
Joan Wingate Lamb Ullyot, a.b. (*Wellesley Coll.*) 1961.
David Howe Wegman, a.b. (*Swarthmore Coll.*) 1963.

Michael Samuel Weiner, a.b. 1962.
George Franklin Welsh, a.b. (*Carleton Coll.*) 1962, s.b. in med. (*Univ. of North Dakota*) 1964.
Ernest Alfred Weymuller, Jr., a.b. (*Dartmouth Coll.*) 1962, b.med. sci. (*ibid.*) 1964.
Paul Ira Winig, a.b. 1962.
Dean Francis Young, a.b. (*Kenyon Coll.*) 1962.

*M.D. cum laude for Thesis in a Special Field*

Robert Burns Gunn, s.b. (*Univ. of Michigan*) 1961.
Barbara Joyce McNeil, a.b. (*Emmanuel Coll.*) 1962.
John Mills, 5th, s.b. (*Univ. of Chicago*) 1961.

*M.D. cum laude*

Alan Robert Baker, a.b. (*Bowdoin Coll.*) 1962.
Philip Ross Boulter, a.b. (*Bowdoin Coll.*) 1962, b.med.sci. (*Dartmouth Coll.*) 1964.
Irwin Allan Buchwald, a.b. (*Amherst Coll.*) 1962.
Edwin Hughes Cassem, a.b. (*St. Louis Univ.*) 1959, ph.l. (*ibid.*) 1960, a.m. (*ibid.*) 1961.
Robert Morehead Crowell, a.b. (*Princeton Univ.*) 1962.
Bruce St. John Cutler, a.b. (*Princeton Univ.*) 1962.
David Chandler Dale, s.b. (*Carson-Newman Coll.*) 1962.
Mahlon Robert DeLong, a.b. (*Stanford Univ.*) 1961.
Richard Safir Galin, a.b. (*Univ. of Wisconsin*) 1962.
Myron David Ginsberg, a.b. (*Wesleyan Univ.*) 1961.
Thomas Harter Bachrach Glick, a.b. 1961.
Thomas Carl Goldman, a.b. (*Cornell Univ.*) 1962.
Charles Joseph Hatem, s.b. (*Boston Coll.*) 1962.
Michael Lee Kern, a.b. (*Yale Univ.*) 1962.
Lorrin Michael Koran, a.b. 1962.
Michael Franklin Marmor, a.b. 1962.
Neil Scott McNutt, s.b. (*Univ. of Arizona*) 1961, s.m. (*ibid.*) 1962.
George Emanuel Mendelsohn, a.b. 1962.
Robert Peter Mogielnicki, a.b. (*Cornell Univ.*) 1962.
Thomas Patrick Charles Monath, a.b. 1962.
Ross Francis Neisuler, a.b. 1962.
Scott Haviland Nelson, a.b. (*Yale Univ.*) 1962.
Mark Edward Oren, a.b. (*Cornell Univ.*) 1962.

Theodore Paul Pincus, a.b. (*Columbia Univ.*) 1961.
Stephen Proskauer, a.b. 1962.
Kent Ravenscroft, Jr., a.b. (*Yale Univ.*) 1962.
Loren Henry Roth, a.b. (*Cornell Univ.*) 1961.
Robert Harold Rubin, a.b. (*Williams Coll.*) 1962.
Stephen Carl Schoenbaum, a.b. (*Swarthmore Coll.*) 1962.
Joseph Daniel Schulman, a.b. (*Brooklyn Coll.*) 1962.
Harold Carleton Sox, Jr., s.b. (*Stanford Univ.*) 1961.
Alfred David Steinberg, a.b. (*Princeton Univ.*) 1962.
Phillip Harding Taylor, a.b. (*Dartmouth Coll.*) 1963, b.med.sci. (*ibid.*) 1964.
Louis Evan Teichholz, a.b. 1962.
Robert Laurence Trelstad, a.b. (*Columbia Univ.*) 1961.
Bruce Dale Weintraub, a.b. (*Princeton Univ.*) 1962.
William Costin Wood, s.b. (*Wheaton Coll.*) 1962.

*M.D. magna cum laude for Thesis in a Special Field*

Robert Arthur Greenes, a.b. (*Univ. of Michigan*) 1962.
Samuel Strober, a.b. (*Columbia Univ.*) 1961.

*M.D. magna cum laude*

Laurence Holland Beck, a.b. (*Amherst Coll.*) 1962.
Gilbert Harlan Daniels, s.b. (*Yale Univ.*) 1962.
Joel Paul Friedman, a.b. (*Princeton Univ.*) 1962.
Edward Joseph Goetzl, a.b. (*Amherst Coll.*) 1962.
Gilman Drew Grave, a.b. 1962.
Edward Jay Pollock, a.b. (*Northwestern Univ.*) 1961.

On March 13, 1967, One Degree was Conferred as Follows:

William Alexander, a.b. (*Brandeis Univ.*) 1962.

## INTERNSHIPS

### CLASS OF JUNE 1966

Unless otherwise noted all internships started July 1, 1966 for one year.

| *Name* | *Hospital (and location)* | *Service* |
|---|---|---|
| Akins, Carlton M. | St. Paul-Ramsey Hospital, St. Paul, Minnesota | Rotating |
| Alexander, William | Mount Zion Hospital and Medical Center, San Francisco, California | Mixed |
| Appel, Eugene L. | Presbyterian Hospital, New York, New York | Surgery |
| Aronow, Abraham | Bellevue Hospital Center (New York University Service), New York, New York | Medicine |
| Baker, Alan R. | Peter Bent Brigham Hospital, Boston | Surgery |
| Bauman, Dennis J. | University of Utah Affiliated Hospitals, Salt Lake City, Utah | Mixed |
| Beck, Laurence H. | Massachusetts General Hospital, Boston | Medicine |
| Bell, Russell S. | King County Hospital, Seattle, Washington | Rotating |
| Bergman, David B. | Bronx Municipal Hospital Center, New York, New York | Mixed |
| Boulter, Philip R. | Boston City Hospital (Harvard Service), Boston | Medicine |
| Bradley, Jane E. | University of Virginia Hospital, Charlottesville, Virginia | Medicine |
| Branda, Richard F. | University of Minnesota Hospitals, Minneapolis, Minnesota | Medicine |
| Breeden, C. Jane | University of California Hospitals, San Francisco, California | Medicine |
| Brener, Bruce J. | Peter Bent Brigham Hospital, Boston | Surgery |
| Brown, Stephen M. | Bronx Municipal Hospital Center, New York, New York | Pediatrics |

| *Name* | *Hospital (and location)* | *Service* |
|---|---|---|
| Buchwald, Irwin A. | Bronx Municipal Hospital Center, New York, New York | Medicine |
| Bunn, Jack C. | Grady Memorial Hospital, Atlanta, Georgia | Medicine |
| Carleton, William M. | Beth Israel Hospital, Boston | Medicine |
| Cassem, Ned H. | Bronx Municipal Hospital Center, New York, New York | Medicine |
| Catlin, Brian | Boston City Hospital (Harvard Service), Boston | Surgery |
| Christian, Roger L. | Peter Bent Brigham Hospital, Boston | Surgery |
| Cihak, Robert J. | Palo Alto-Stanford University Hospital Center, Palo Alto, California | Surgery |
| Clapp, Roger W. | Mount Sinai Hospital of Cleveland, Cleveland, Ohio | Rotating |
| Colman, Gerald B. | Medical College of Virginia, Richmond, Virginia | Surgery |
| Crowell, Robert M. | Massachusetts General Hospital, Boston | Surgery |
| Cutler, Bruce S. | Massachusetts General Hospital, Boston | Surgery |
| Dale, David C. | Massachusetts General Hospital, Boston | Medicine |
| Daniels, Gilbert H. | Massachusetts General Hospital, Boston | Medicine |
| DeLong, Mahlon R. | Boston City Hospital (Harvard Service), Boston | Medicine |
| Edelson, Richard N. | Presbyterian-St. Luke's Hospital, Chicago, Illinois | Medicine |
| Falchuk, Kenneth H. | Peter Bent Brigham Hospital, Boston | Medicine |
| Federico, John V. | Yale-New Haven Medical Center, New Haven, Connecticut | Pediatrics |
| Finseth, Frederick J. | Massachusetts General Hospital, Boston | Surgery |

| *Name* | *Hospital (and location)* | *Service* |
|---|---|---|
| Fletcher, Robert H. | Stanford University Affiliated Hospitals, Palo Alto, California | Medicine |
| Fletcher, Suzanne E. W. | Stanford University Affiliated Hospitals, Palo Alto, California | Medicine |
| Fox, Howard J. | University of Colorado Medical Center, Denver, Colorado | Surgery |
| Friedman, Joel P. | Peter Bent Brigham Hospital, Boston | Medicine |
| Galin, Richard S. | University of California Hospital, Los Angeles, California | Medicine |
| Garren, Ronald B. | Bellevue Hospital Center (Columbia Service), New York, New York | Mixed |
| Gettelfinger, Thomas C. | King County Hospital, Seattle, Washington | Rotating |
| Gilmour, David P. | Boston City Hospital (Harvard Service), Boston | Medicine |
| Ginsberg, Myron D. | Boston City Hospital (Harvard Service), Boston | Medicine |
| Glass, Jonathan | Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania | Medicine |
| Glick, Thomas H. B. | Presbyterian Hospital, New York, New York | Medicine |
| Goetzl, Edward J. | Peter Bent Brigham Hospital, Boston | Medicine |
| Goldman, Thomas C. | University of Chicago Hospitals and Clinics, Chicago, Illinois | Medicine |
| Gordon, James H. | Duke Hospital, Durham, North Carolina | Medicine |
| Gottlieb, Jeffrey A. | Barnes Hospital, St. Louis, Missouri | Medicine |
| Grave, Gilman D. | Massachusetts General Hospital, Boston | Medicine |
| Greenes, Robert A. | Graduate Study in Computer Science | Medicine |
| Guiney, Timothy E. | Duke Hospital, Durham, North Carolina | Medicine |

| *Name* | *Hospital (and location)* | *Service* |
|---|---|---|
| Gunn, Robert B. | Beth Israel Hospital, Boston | Medicine |
| Hannah, Richard J. | Vanderbilt University Hospital, Nashville, Tennessee | Medicine |
| Hardman, George L. | Vanderbilt University Hospital, Nashville, Tennessee | Pediatrics |
| Harley, Ned R. | Mount Zion Hospital and Medical Center, San Francisco, California | Mixed |
| Hatem, Charles J. | Boston City Hospital (Harvard Service), Boston | Medicine |
| Hawkins, Harold B. | Palo Alto-Stanford University Hospital Center, Palo Alto, California | Surgery |
| Hrehorovich, Victor R. | Bellevue Hospital Center (Cornell Service), New York, New York | Medicine |
| Hughes, Edward F. X. | Presbyterian Hospital, New York, New York | Surgery |
| Ilfeld, Frederic W., Jr. | San Francisco General Hospital, San Francisco, California | Rotating |
| Jacobs, Edward E., Jr. | Massachusetts General Hospital, Boston | Surgery |
| Jurgeleit, H. Clement | University Hospital, Ann Arbor, Michigan | Surgery |
| Kaldor, Richard H. | St. Paul-Ramsey Hospital, St. Paul, Minnesota | Rotating |
| Kaufman, Jay H. | Medical College of Virginia, Richmond, Virginia | Surgery |
| Kern, Michael L. | Los Angeles County General Hospital, Los Angeles, California | Rotating |
| Knab, Richard E. | Boston City Hospital (Harvard Service), Boston | Surgery |
| Koops, Herbert J. | Peter Bent Brigham Hospital, Boston | Surgery |
| Koran, Lorrin M. | University of California Hospital, Los Angeles, California | Medicine |
| Krainin, James M. | Jewish Hospital of St. Louis, St. Louis, Missouri | Medicine |
| Krant, David A. | University of Minnesota Hospitals, Minneapolis, Minnesota | Surgery |

| *Name* | *Hospital (and location)* | *Service* |
|---|---|---|
| Leary, Joan M. | Yale-New Haven Medical Center, New Haven, Connecticut | Pediatrics |
| Levine, Melvin D. | Children's Hospital Medical Center, Boston | Pediatrics |
| Levine, Norman S. | Medical College of Virginia, Richmond, Virginia | Surgery |
| Levisohn, Steven R. | Jewish Hospital of St. Louis, St. Louis, Missouri | Medicine |
| Loew, Donald E. | University Hospitals of Cleveland, Cleveland, Ohio | Medicine |
| Ludden, John M. | University Hospital, Seattle, Washington | Medicine |
| McGillicuddy, John E. | Medical College of Virginia, Richmond, Virginia | Surgery |
| McInerny, Thomas K. | Cincinnati General Hospital, Cincinnati, Ohio | Pediatrics |
| McNeil, Barbara J. | Massachusetts General Hospital, Boston | Pediatrics |
| McNutt, N. Scott | Harvard Medical School, Boston | Anatomy |
| Marmor, Michael F. | University of California Hospital, Los Angeles, California | Medicine |
| Mendelsohn, George E. | Boston City Hospital (Harvard Service), Boston | Medicine |
| Micheli, Lyle J. | University Hospitals of Cleveland, Cleveland, Ohio | Surgery |
| Mills, John | Boston City Hospital (Harvard Service), Boston | Medicine |
| Mogielnicki, R. Peter | Massachusetts General Hospital, Boston | Medicine |
| Mohit, Roberta H. | Georgetown University Hospital, Washington, D.C. | Medicine |
| Monath, Thomas P. C. | Peter Bent Brigham Hospital, Boston | Medicine |
| Nasr, Hooshang | Buffalo General Hospital, Buffalo, New York | Medicine |
| Neisuler, Ross F. | Bellevue Hospital Center (Columbia Service), New York, New York | Mixed |

| *Name* | *Hospital (and location)* | *Service* |
|---|---|---|
| Nelson, Scott H. | King County Hospital, Seattle, Washington | Rotating |
| Olsen, George D. | University Hospitals of Cleveland, Cleveland, Ohio | Medicine |
| Oren, Mark E. | Beth Israel Hospital, Boston | Medicine |
| Owen, Robert L. | Beth Israel Hospital, Boston | Medicine |
| Payne, Douglas D. | Strong Memorial Hospital, Rochester, New York | Surgery |
| Pidot, Anne L. R. | Mary Hitchcock Memorial Hospital, Hanover, New Hampshire | Rotating |
| Pincus, Theodore P. | Massachusetts General Hospital, Boston | Surgery |
| Pine, Michael B. | Montefiore Hospital and Medical Center, New York, New York | Mixed |
| Pipkin, Robert D. | Johns Hopkins Hospital, Baltimore, Maryland | Surgery |
| Pollock, Edward J. | Massachusetts General Hospital, Boston | Medicine |
| Poole, Thomas A. | Buffalo General Hospital, Buffalo, New York | Medicine |
| Prager, Elliot D. | Roosevelt Hospital, New York, New York | Mixed |
| Proskauer, Stephen | DeGoesbriand Memorial Hospital, Burlington, Vermont | Mixed |
| Ravenscroft, Kent, Jr. | Bronx Municipal Hospital Center, New York, New York | Mixed |
| Reckler, Jon M. | University Hospitals of Cleveland, Cleveland, Ohio | Surgery |
| Rie, Michael A. | Presbyterian-St. Luke's Hospital, Chicago, Illinois | Medicine |
| Roglieri, John L. | Bellevue Hospital Center (Columbia Service), New York, New York | Mixed |
| Roots, Logan H. | King County Hospital, Seattle, Washington | Rotating |
| Roth, Loren H. | University Hospitals of Cleveland, Cleveland, Ohio | Medicine |

| *Name* | *Hospital (and location)* | *Service* |
|---|---|---|
| Rothenberg, Richard B. | Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania | Medicine |
| Rubin, Robert H. | Peter Bent Brigham Hospital, Boston | Medicine |
| Scharff, David E. | New England Center Hospital, Boston | Medicine |
| Schoenbaum, Stephen C. | University of Minnesota Hospitals, Minneapolis, Minnesota | Medicine |
| Scholand, Joseph F. | University Hospitals, Columbus, Ohio | Medicine |
| Schott, John W. | University of Minnesota Hospitals, Minneapolis, Minnesota | Medicine |
| Schulman, Joseph D. | Massachusetts General Hospital, Boston | Pediatrics |
| Shipley, William U. | Massachusetts General Hospital, Boston | Surgery |
| Shumaker, Jay B. | Jewish Hospital of St. Louis, St. Louis, Missouri | Medicine |
| Siegel, Robert C. | University of California Hospitals, San Francisco, California | Medicine |
| Sigman, Robert L. | Boston City Hospital (Harvard Service), Boston | Surgery |
| Smith, Richard W. | University of Minnesota Hospitals, Minneapolis, Minnesota | Medicine |
| Sox, Harold C., Jr. | Massachusetts General Hospital, Boston | Medicine |
| Steinberg, Alfred D. | Bronx Municipal Hospital Center, New York, New York | Medicine |
| Stevenson, John E. | University of Minnesota Hospitals, Minneapolis, Minnesota | Medicine |
| Strober, Samuel | Massachusetts General Hospital, Boston | Medicine |
| Strong, Steven R. | Hennepin County General Hospital, Minneapolis, Minnesota | Rotating |
| Stubblefield, Phillip G. | University Hospital, Ann Arbor, Michigan | Surgery |

| *Name* | *Hospital (and location)* | *Service* |
|---|---|---|
| Sun, Andrew S. O. | Presbyterian Medical Center, San Francisco, California | Rotating |
| Sweetland, Ralph C. | Strong Memorial Hospital, Rochester, New York | Surgery |
| Swett, Chester P., Jr. | Boston City Hospital (Harvard Service), Boston | Surgery |
| Taylor, Phillip H. | Peter Bent Brigham Hospital, Boston | Surgery |
| Teichholz, Louis E. | Peter Bent Brigham Hospital, Boston | Medicine |
| Torop, Paul | Mount Zion Hospital and Medical Center, San Francisco, California | Mixed |
| Trelstad, Robert L. | Massachusetts General Hospital, Boston | Pathology |
| Ullyot, Joan W. L. | Beth Israel Hospital, Boston | Pathology |
| Wegman, David H. | Cleveland Metropolitan General Hospital, Cleveland, Ohio | Medicine |
| Weiner, Michael S. | Mount Auburn Hospital, Cambridge | Mixed |
| Weintraub, Bruce D. | Peter Bent Brigham Hospital, Boston | Medicine |
| Welsh, G. Franklin | United States Air Force (Lackland AFB), San Antonio, Texas | Rotating |
| Weymuller, Ernest A., Jr. | Vanderbilt University Hospital, Nashville, Tennessee | Surgery |
| Winig, Paul I. | Medical College of Virginia, Richmond, Virginia | Surgery |
| Wood, William C. | Massachusetts General Hospital, Boston | Surgery |
| Young, Dean F. | University of Minnesota Hospitals, Minneapolis, Minnesota | Medicine |

N.B. Where the name of the state is omitted, the state is Massachusetts.

# MEDICAL SCHOOL STUDENTS
(as of registration September 1966)

## Fourth Year Class (1967)

Aaron, Robert Steven, A.B. (*Columbia Univ.*) 1963. *Teaneck, N.J.*
*Adelekan, Adetunji, S.B. (*Ohio State Univ.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Lagos, Nigeria*
Asher, John David, A.B. 1961. *Ithaca, N.Y.*
Axelrod, Lloyd, A.B. (*Princeton Univ.*) 1963. *New York, N.Y.*
Bagley, Charles Miller, Jr., A.B. (*Carleton Coll.*) 1963. *Duluth, Minn.*
Ballantine, Thomas Van Ness, A.B. (*Princeton Univ.*) 1963. *Boston*
*Bayard, Edward Quint, A.B. 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Newton*
Berc, Kenneth Myles, A.B. (*Colgate Univ.*) 1963. *Rosyln, N.Y.*
Bernet, Francis William, A.B. (*Coll. of the Holy Cross*) 1963. *Marblehead*
Bissell, Dwight Montgomery, Jr., A.B. 1962. *Saratoga, Calif.*
Bleiberg, Mona Louise, A.B. (*Univ. of Chicago*) 1963. *Maplewood, N.J.*
Bonnar, James Millar, 3d, A.B. 1963 *Middleboro*
Brauner, Gary Jules, A.B. (*Yale Univ.*) 1963. *Fairfield, Conn.*
Bucknall, William Eric, A.B. (*Univ. of Texas*) 1963. *Austin, Texas*
Burgess, Joan Tucker, A.B. (*Oberlin Coll.*) 1963. *Warren, R.I.*
*Carolan, Robert Mills, A.B. (*Coll. of the Holy Cross*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Norwood*
Chesebro, Bruce Wilcox, S.B. (*California Inst. of Technology*) 1963. *Los Angeles, Calif.*
*Christensen, William Ivor, A.B. 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Denver, Colo.*
Chused, Judith Ann Fingert, A.B. (*Wellesley Coll.*) 1963. *St. Louis, Mo.*

‡ Admitted on the basis of three years' college work.
° Transferred to the second year class.
* Transferred to the third year class.
† Degree conferred by Harvard University.
+ Leave of absence first semester.
N.B. Where the college name is omitted, the college is Harvard; where the state is omitted, the state is Massachusetts.

*Chused, Thomas Morton, A.B. 1962. [New York Univ. School of Medicine]. *St. Louis, Mo.*

Conger, Seymour Beach, A.B. (*Amherst Coll.*) 1963. *Pleasantville, N.Y.*

Daniel, Alan, A.B. (*Amherst Coll.*) 1963. *New York, N.Y.*

Desser, Richard Kenneth, A.B. (*Univ. of California, Berkeley*) 1963. *Chicago, Ill.*

Diamond, Richard Donald, A.B. (*Brooklyn Coll. of The City Univ. of New York*) 1963. *Brooklyn, N. Y.*

Dolin, Raphael, A.B. 1963. *Allen Park, Mich.*

Donahue, Valentina Elizabeth Clark, A.B. (*Barnard Coll.*) 1962. *Brooklyn, N.Y.*

Dorman, John Merrill, A.B. (*Williams Coll.*) 1963. *Pittsfield*

Dorner, Douglas Bloom, A.B. (*Amherst Coll.*) 1963. *Des Moines, Iowa*

*Dunham, Tom Robert, A.B. (*Willamette Univ.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Salem, Oregon*

°Dushman, Miriam Bonita, A.B. (*Barnard Coll.*) 1959, S.M. (*Massachusetts Inst. of Technology*) 1964. [Columbia Univ. of Coll. of Physicians and Surgeons]. *Bronx, N. Y.*

Eagleton, Lanie Earl, A.B. (*Hamilton Coll.*) 1963. *Olney, Ill.*

Ellman, Leonard Lloyd, A.B. 1963. *Brooklyn, N.Y.*

Erdmann, Albert John, 3d, A.B. 1963. *New York, N.Y.*

*Falchuk, Zalman Myron, (*Dartmouth Coll.*) B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. *Maracay, Venezuela*

Finseth, Katherine Frances Alden, A.B.† (*Radcliffe Coll.*) 1963. *Cleveland, Ohio*

*Fischer, John Robert, A.B. (*Dartmouth Coll.*) 1963, S.B. IN MED. (*Univ. of North Dakota*) 1965. [Univ. of North Dakota School of Medicine]. *Minot, N. Dak.*

*Floyd, Richard Paul, A.B. (*Middlebury Coll.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Weston*

Funkenstein, Herrman Harris, A.B. (*Princeton Univ.*) 1961; B.A. (*Univ. of Oxford*) 1963. *Boston*

‡Galton, Virginia Renée. (*Univ. of Rochester*) *New York, N.Y.*

Gardner, Laurence Bernard, S.B. (*Massachusetts Inst. of Technology*) 1963. *Lynbrook, N.Y.*

*Garibaldi, Richard Alfred, A.B. 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *West Roxbury*

Gelb, Lawrence David, S.B. (*Univ of Michigan*) 1963. *Detroit, Mich.*

‡Goldsmith, Philip Lawrence, A.B. (*Cornell Univ.*) 1964. *New York, N.Y.*

Goldstein, Stanton Philip, A.B. 1963. *Ossining, N.Y.*

Gordon, James Samuel, A.B. 1962. *New York, N.Y.*

Gorelick, Kenneth Paul, A.B. (*Rutgers Univ.*) 1962. *Paterson, N.J.*

Greene, Andrew Frank, A.B. (*Amherst Coll.*) 1963. *Cincinnati, Ohio*

*Griffin, Walter Joseph, Jr., A.B. (*Coll. of the Holy Cross*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Worcester*

*Gunderson, John Gunder, (*Johns Hopkins Univ.*), B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Oshkosh, Wis.*

Gustafson, James Paul, A.B. 1963. *Saginaw, Mich.*

Gutheil, Thomas Gordon, A.B. 1963. *New York, N.Y.*

Hayes, Charles Robert, A.B. (*Yale Univ.*) 1962. *Keytesville, Mo.*

Hirschfeld, David Seth, A.B. 1963. *Woods Hole*

Holmes, Robert Henry, A.B. (*Amherst Coll.*) 1963. *Denver, Colo.*

Holt, William Steven, S.B. (*Bates Coll.*) 1963. *Waterville, Maine*

*Horwich, Mark Stephen, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. *Denver, Colo.*

Hurwitz, Alfred Lewis, A.B. 1963. *Brookline*

Irwin, Robert Joseph, A.B. (*Denison Univ.*) 1963. *Cleveland, Ohio*

*Jarrett, Fredric, A.B. (*Dartmouth Coll.*) 1963, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. *Newton Centre*

Jencks, Stephen Francis, A.B. 1962. *Towson, Md.*

Johnson, Burt Powers, A.B. 1962. *Ardsley, N.Y.*

*Johnson, David Gregory, A.B. (*Yale Univ.*) 1962, B. MED. SCI. (*Dartmouth Coll.*) 1964. [Dartmouth Medical School]. *Belvidere, Ill.*

Joseph, Neil Howard, S.B. (*Union Coll.*) 1961. *East Quogue, N.Y.*

Kadish, Anna Stein, A.B. (*Barnard Coll.*) 1963. *New York, N.Y.*

Kadish, Lawrence Jerome, A.B. (*Princeton Univ.*) 1963. *West Orange, N.J.*

Kahn, James Brodie, A.B. 1963. *Manchester, N.H.*

Kahn, Jesse Lewis, A.B. (*Brooklyn Coll. of The City Univ. of New York*) 1963. *Brooklyn, N.Y.*

Kempczinski, Richard Francis, A.B. (*Coll. of the Holy Cross*) 1962. *Brooklyn, N.Y.*

Knopf, Harry Louis Safir, A.B. 1963. *Trenton, N.J.*

Korshin, Oliver Marc, A.B. (*St. John's Coll., Maryland*) 1963. *Whitestone, N.Y.*

Kourides, Ione Anne, A.B. (*Wellesley Coll.*) 1963. *Forest Hills, N.Y.*
Kumpe, David Allen, A.B. (*Oberlin Coll.*) 1963. *Covington, Ky.*
Kupor, Lary Richard, S.B. (*Brooklyn Coll. of The City Univ. of New York*) 1963. *Brooklyn, N.Y.*
Landrigan, Philip John, A.B. (*Boston Coll.*) 1963. *West Roxbury*
*Latty, Alexander Basil, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. *Yarmouth, Maine*
Lazar, Gerald Kenneth, A.B. (*Brooklyn Coll. of The City Univ. of New York*) 1963. *Brooklyn, N.Y.*
Levine, Stanley Bryant, S.B. (*Tufts Univ.*) 1963. *Denver, Colo.*
Lewinnek, George Eric, A.B. (*Carleton Coll.*) 1963. *Merrill, Wis.*
*Liggio, Raymond, A.B. (*Yale Univ.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Jackson Heights, N.Y.*
Lisanti, Michael Joseph, A.B. (*Cornell Univ.*) 1963. *Brooklyn, N.Y.*
Loewenstein, Matthew Samuel, S.B. (*Union Coll.*) 1962. *Forest Hills, N.Y.*
Mabogunje, Oluwatope Abimbola, A.B. (*Brandeis Univ.*) 1963. *Ibadan, Nigeria*
*McAlary, Brian Gerard, A.B. (*Colby Coll.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Waterville, Maine*
MacDougal, Bruce Albert, A.B. (*Williams Coll.*) 1963. *Bangor, Maine*
*McGowan, John Edward, Jr., (*Providence Coll.*), B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Garden City, N.Y.*
*McLennan, James Edward, S.B. (*Stanford Univ.*) 1962. [Stanford Univ. School of Medicine]. *Palo Alto, Calif.*
*Mahnke, Mark William, A.B. 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Walla Walla, Wash.*
Malter, Ira Joel, A.B. (*Columbia Univ.*) 1963. *Riverdale, N.Y.*
Mark, Eugene Jerome, A.B. (*Oberlin Coll.*) 1962. *Kent, Ohio*
Mastroianni, Nicholas Anthony, Jr., A.B. 1962. *Hopedale*
Meissner, William Walter, A.B. (*St. Louis Univ.*) 1956; A.M. (*ibid.*) 1957; PH.L. (*ibid.*) 1957; S.T.B. (*Woodstock Coll.*) 1960; S.T.L. (*ibid.*) 1962. *Buffalo, N.Y.*
Mills, Roberta Ann, S.B. (*Allegheny Coll.*) 1963. *St. Albans, W. Va.*
Mitch, William Evans, 2d, A.B. 1963. *Birmingham, Ala.*
Molinoff, Perry Brown, A.B. 1962. *Smithtown, N.Y.*
*Mooney, Peter Bryan, A.B. (*Univ. of New Hampshire*) 1959, S.M.

(*ibid.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Belmont, N.H.*

Morris, Ira Alan, A.B. (*Boston Univ.*) 1963. *Cambridge*

Morrison, Peter Nelson, A.B. (*Columbia Univ.*) 1963. *Great Neck, N.Y.*

*Muroff, Lawrence Ross, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. *Broomall, Pa.*

Murphy, William Mont, A.B. (*Drake Univ.*) 1963. *Des Moines, Iowa*

Murray, Michael John, A.B. (*State Univ. of Iowa*) 1963. *Logan, Iowa*

Muzzarelli, Uberto Tommaso, A.B. (*Amherst Coll.*) 1961. *Fermo, Italy*

+ Nelson, John Paul, A.B. (*Univ. of Notre Dame*) 1962. *Breckenridge, Minn.*

Newhouse, Jeffrey Hooker, A.B. (*Princeton Univ.*) 1963. *Upper Nyack, N.Y.*

Ogunye, Medrose Olu, A.B. (*Western Reserve Univ.*) 1963. *Ondo, Nigeria*

O'Neill, Daniel Patrick, S.B. (*Massachusetts Inst. of Technology*) 1963. *Roslindale*

Pasternak, Derick Peter, A.B. 1963. *New York, N.Y.*

Phillips, Lawrence Stone, A.B. (*Swarthmore Coll.*) 1963. *Washington, D.C.*

Pitts, William Reid, Jr., A.B. (*Princeton Univ.*) 1963. *Charlotte, N.C.*

*Pressman, Barry David, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. *Brooklyn, N.Y.*

Putnoi, Donald William, A.B. (*Columbia Univ.*) 1963. *Brooklyn, N.Y.*

*Ram, Meryl Henry, (*Cornell Univ.*), B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Caldwell, N.J.*

*Reigart, John Routt, 2d, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. *Charleston, S.C.*

Reiling, Richard Bernard, S.B. (*Univ. of Dayton*) 1963. *Dayton, Ohio*

Rogell, Gerald David, A.B. 1963. *Newton Centre*

Rohde, Jon Eliot, A.B. (*Amherst Coll.*) 1963. *Barrington, R.I.*

Roth, Gerald James, A.B. 1963. *Mankato, Minn.*

Ruberg, Robert Lionel, A.B. (*Haverford Coll.*) 1963. *Philadelphia, Pa.*

Saxbe, William Bart, Jr., A.B. (*Amherst Coll.*) 1963. *Mechanicsburg, Ohio*

Schantz, Arthur Stephen, S.B. (*Massachusetts Inst. of Technology*) 1963. *Brooklyn, N.Y.*

Schnitker, Paul Clayton, A.B. (*Yale Univ.*) 1963. *Toledo, Ohio*

Schoolwerth, Anton Cornelis, A.B. (*Princeton Univ.*) 1963. *Glen Ellyn, Ill.*

*Schuler, John Gordon, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. *Newton Centre*

*Segel, William Dana, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. *Brookline*

*Sewall, Warren, S.B. (*Massachusetts Inst. of Technology*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *West Hartford, Conn.*

Shapiro, Daniel William, S.B. (*Massachusetts Inst. of Technology*) 1963. *New York, N.Y.*

Shenkin, Budd Norman, A.B. 1963. *Wynnewood, Pa.*

Sherwood, Michael Ralph, A.B. (*Princeton Univ.*) 1960, B.LITT. (*Univ. of Oxford*) 1965. *Milwaukee, Wis.*

Shulman, Richard Stanley, A.B. 1963. *Swampscott*

Siegel, Arthur Jay, A.B. (*Swarthmore Coll.*) 1962. *Bal Harbour, Fla.*

Silver, David Jay, A.B. (*Amherst Coll.*) 1963. *Bristol, Conn.*

Simmons, Michael Anthony, A.B. 1963. *Fort Wayne, Ind.*

Simon, Harvey Bruce, A.B. (*Yale Univ.*) 1963. *Fort Lauderdale, Fla.*

Singer, Karl Lawrence, A.B. 1963. *Huntington Woods, Mich.*

*Sites, Vincent Raymond, A.B. (*Johns Hopkins Univ.*) 1963. B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Miami, Fla.*

Smith, Donald Angehr, A.B. 1963. *Little Rock, Ark.*

Smith, Douglas Grant, A.B. (*Pomona Coll.*) 1963. *San Marino, Calif.*

Sommer, Alfred, S.B. (*Union Coll.*) 1963. *Jamaica, N.Y.*

*Stein, Stephen Alan, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. *Waterbury, Conn.*

Stossel, Thomas Peter, A.B. (*Princeton Univ.*) 1963. *Wilmette, Ill.*

Sugihara, Jared Genji, A.B. (*Yale Univ.*) 1963. *Honolulu, Hawaii*

Walker, Pamela Pauline, A.B.† (*Radcliffe Coll.*) 1963. *Montclair, N.J.*

Weiden, Paul Lincoln, A.B. 1963. *Atherton, Calif.*

Weikel, Anthony Monroe, S.B. (*Massachusetts Inst. of Technology*) 1963. *Lathrop Village, Mich.*

Weinerth, John Louis, S.B. (*Bucknell Univ.*) 1963. *Easton, Pa.*

Weir, Gordon Campbell, A.B. (*Dartmouth Coll.*) 1963. *Cleveland Heights, Ohio*

Wesley, John Robert, A.B. 1963. *Ann Arbor, Mich.*

*White, Eric Shaw, S.B. (*Yale Univ.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Winchendon Springs*

*Winterer, Joerg Constantine, A.B. (*Haverford Coll.*) 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Northampton*

*Wise, Jonathan Kurland, A.B. 1963, B. MED. SCI. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *Haverhill*

Wolman, Carol Stone, A.B. (*Radcliffe Coll.*) 1962. *Philadelphia, Pa.*

*Wright, Peter Farnum, A.B. (*Dartmouth Coll.*) 1964, B. MED. SCI. (*ibid.*) 1965. [Dartmouth Medical School]. *New York, N.Y.*

Zaentz, Samuel Donald, A.B. (*Williams Coll.*) 1963. *Clifton, N.J.*

## Third Year Class (1968)

Adair, Richard Franklin, A.B. 1964. *St. Paul, Minn.*

Anderson, Einar Wulfsberg, A.B. (*Stanford Univ.*) 1963. *Arcadia, Calif.*

Arradondo, John El Roy, A.B. (*Oklahoma City Univ.*) 1963. *Altus, Okla.*

*Ascher, Michael Stoskopf, A.B. (*Univ. of Colorado*) 1964, B.M.S. (*Dartmouth Coll.*) 1966. [Dartmouth Medical School]. *Freeport, Ill.*

*Aufranc, St. George Tucker (*Univ. of Virginia*). [Univ. of Virginia School of Medicine]. *Wellesley Hills*

*Benz, Ronald Ralph, A.B. (*Dartmouth Coll.*) 1964, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Orchard Park, N.Y.*

*Boerstling, Herbert, A.B. (*Dartmouth Coll.*) 1965. B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Seoul, Korea*

*Borden, Spencer, 4th, A.B. 1963, B.M.S. (*Dartmouth Coll.*) 1966, [Dartmouth Medical School]. *Concord*

Brandt, John Henry, A.B. (*Yale Univ.*) 1962. *Lakewood, Ohio*

Breslow, Jan Leslie, A.B. (*Columbia Univ.*) 1963, A.M. (*ibid.*) 1964. *Brooklyn, N.Y.*

Brier, Arnold Michael, A.B. (*Univ. of Chicago*) 1964. *Dayton, Ohio*

Brownstein, Carlton Stewart, A.B. (*Williams Coll.*) 1964. *Baldwin, N.Y.*

‡ Admitted on the basis of three years' college work.
° Transferred to the second year class.
* Transferred to the third year class.
† Degree conferred by Harvard University.
+ Leave of absence first semester.
N.B. Where the college name is omitted, the college is Harvard; where the state is omitted, the state is Massachusetts.

*Bruggeman, Lewis LeRoy, A.B. (*Dartmouth Coll.*) 1963, B.M.S. (*ibid.*) 1965. [Dartmouth Medical School]. *Suffern, N.Y.*

*Bullock, John David, A.B. (*Dartmouth Coll.*) 1965, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Cincinnati, Ohio*

Burdick, James Frederick, S.B. (*Yale Univ.*) 1964. *Alfred, N.Y.*

*Carpenter, Herschel Andrea, A.B. (*Univ. of North Dakota*) 1965, S.B. IN MED. (*ibid.*) 1966. [Univ. of North Dakota School of Medicine]. *Lakewood, Calif.*

*Cebrik, Michael Melvin, A.B. (*Dartmouth Coll.*) 1964, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Nutley, N.J.*

*Chagnon, Suzanne Esther, A.B. (*Univ. of Vermont*) 1964, B.M.S. (*Dartmouth Coll.*) 1966. [Dartmouth Medical School]. *Nashua, N.H.*

Chen, Lincoln Chih-ho, A.B. (*Princeton Univ.*) 1964. *New York, N.Y.*

Chivian, Eric Seth, A.B. 1964. *Millburn, N.J.*

*Clough, Wendy Glasgow, A.B. †(*Radcliffe Coll.*) 1964, B.M.S. (*Dartmouth Coll.*) 1966. [Dartmouth Medical School]. *Chadds Ford, Pa.*

Cohen, Michael Victor, A.B. 1964. *New York, N.Y.*

Colvin, Robert Barnes, S.B. (*Massachusetts Inst. of Technology*) 1964. *St. Charles, Mo.*

*Cronin, Patricia Elaine, A.B. (*Bennington Coll.*) 1964, B.M.S. (*Dartmouth Coll.*) 1966. [Dartmouth Medical School]. *Glen Rock, N.J.*

*Czaja, Albert Joseph, Jr., A.B. (*Dartmouth Coll.*) 1965, B.M.S. (*ibid*) 1966. [Dartmouth Medical School]. *Narberth, Pa.*

Dolgoff, Robert Kenneth, A.B. 1964. *Topeka, Kans.*

*Donaldson, Sarah Susan, S.B. (*Univ. of Oregon School of Nursing*) 1961, B.M.S. (*Dartmouth Coll.*) 1966. [Dartmouth Medical School]. *Portland, Oregon*

Dow, Lois Jean Weyman, A.B. (*Cornell Univ.*) 1964. *Cincinnati, Ohio*

Droller, Michael Jack, A.B. 1964. *Brooklyn, N.Y.*

*Dudley, William Earl, 2d, A.B. (*Dartmouth Coll.*) 1965, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Arlington, Va.*

Eisen, Howard Jay, A.B. 1964. *Miami, Fla.*

Ellsworth, George Avery, A.B. (*Kansas State Univ.*) 1965. *Manhattan, Kans.*

*Ellsworth, Robert Martin, A.B. (*Dartmouth Coll.*) 1965, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Winsted, Conn.*
Fielding, Jonathan Evan, A.B. (*Williams Coll.*) 1964. *Mamaroneck, N.Y.*
Fisher, Morris Alan, A.B. (*Yale Univ.*) 1961. *New York, N.Y.*
Frederick, Robert Arthur, S.B. (*Georgetown Univ.*) 1964. *Wood Ridge, N.J.*
Friedman, Paul Aaron, A.B. (*Princeton Univ.*) 1964. *Baltimore, Md.*
Funkenstein, Daniel Louis, A.B. (*Princeton Univ.*) 1964. *Boston*
Furlong, Maurice Bennett, Jr., A.B. (*Fordham Univ.*) 1964. *Jamestown, N.Y.*
Gail, Mitchell Henry, A.B. 1962. *Lexington, Ky.*
°Garrison, Henry Byron, S.B. (*Yale Univ.*) 1962, B.A. (*Univ. of Oxford*) 1965. [Oxford Univ. Medical School]. *Coral Gables, Fla.*
Goldberg, Deborah Lois Baron, A.B. †(*Radcliffe Coll.*) 1964. *Brookline*
Goldberg, George Ansbach, A.B. 1963. *Mount Vernon, N.Y.*
Goldberg, Michael Ellis, A.B. 1963. *Eastchester, N.Y.*
Goldenson, Ronald Hugh, A.B. (*Princeton Univ.*) 1964. *Harrison, N.Y.*
Gradman, Wayne Stuart, A.B. (*Univ. of Chicago*) 1964. *Skokie, Ill.*
Grana, William Anthony, A.B. 1964. *St. Louis, Mo.*
Greenacre, Judith Kathleen Fisher, A.B. †(*Radcliffe Coll.*) 1964. *New York, N.Y.*
*Gregory, Garth Larsen, A.B. (*Dartmouth Coll.*) 1964, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Tacoma, Wash.*
Guarino, Arthur Victor, A.B. (*Coll. of the Holy Cross*) 1962. *Brooklyn, N.Y.*
Guss, Stephen Bernard, A.B. (*Yale Univ.*) 1964. *Omaha, Nebr.*
Hadler, Nortin Marvin, A.B. (*Yale Univ.*) 1964. *Eastchester, N.Y.*
Hanson, Charles William Davenport, Jr., A.B. 1964. *New York, N.Y.*
*Harris, David Thorme, A.B. (*Dartmouth Coll.*) 1964. B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Stratford, Conn.*
Hawk, Alan Brainard, A.B. (*Amherst Coll.*) 1964. *Pittsburgh, Pa.*
Hejinian, John Paull, A.B. 1962. *New York, N.Y.*
Herman, Judith Lewis, A.B.† (*Radcliffe Coll.*) 1964. *New York, N.Y.*
*Hight, Donald Wadsworth, A.B. (*Dartmouth Coll.*) 1964, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Leicester*
Hochschuler, Stephen Howard, A.B. (*Columbia Univ.*) 1964. *Forest Hills, N.Y.*

Holloran, James Francis, Jr., A.B. (*Coll. of the Holy Cross*) 1964. *Washington, D.C.*

Hurwitz, Barbara Mara, A.B. (*Bryn Mawr Coll.*) 1964. *New Rochelle, N.Y.*

Jakobiec, Frederick Albert, A.B. 1964. *Manchester, N.H.*

Kahn, Henry Slater, A.B. 1964. *Poughkeepsie, N.Y.*

*Kaiser, John Stanton, A.B. (*Carleton Coll.*) 1964, B.M.S. (*Dartmouth Coll.*) 1966. [Dartmouth Medical School]. *Oak Park, Ill.*

*Kanaaneh, Hatim Abdul-Kader, A.B. (*Univ. of Hawaii*) 1964. [Univ. of South Dakota School of Medicine]. *Arabi Village, Israel*

*Kattwinkel, John, S.B. (*Rensselaer Polytechnic Inst.*) 1964, B.M.S. (*Dartmouth Coll.*) 1966. [Dartmouth Medical School]. *Eastham*

Kelley, Jonathan Merrick, A.B. (*Princeton Univ.*) 1961. *West Newton*

°King, Robert Alan, A.B. (*Cornell Univ.*) 1963, B.A. (*Univ. of Oxford*) 1965. [Oxford Univ. Medical School]. *Oak Park, Ill.*

Kluft, Richard Philip, A.B. (*Princeton Univ.*) 1964. *Perth Amboy, N.J.*

Kolonel, Laurence Norman, A.B. (*Williams Coll.*) 1964. *Norwood*

Krauss, Ronald Maxwell, A.B. 1964. *Buffalo, N.Y.*

LaCombe, Michael Arthur, A.B. (*Univ. of Rochester*) 1964. *Ogdensburg, N.Y.*

Levine, David Norman, A.B. (*Yeshiva Univ.*) 1963. *Los Angeles, Calif.*

Levine, Frederick Hugh, A.B. (*Columbia Univ.*) 1964. *Queens Village, N.Y.*

Levy, David Edward, A.B. 1963. *Verona, N.J.*

*Livingston, Jack George, A.B. (*Dartmouth Coll.*) 1965, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Baxter Springs, Kans.*

Lobis, Robert Alan, A.B. (*Univ. of Pennsylvania*) 1964. *Philadelphia, Pa.*

Looker, Andrew Noah, A.B. 1964. *New York, N.Y.*

Lurie, Melvyn Louis, A.B. (*Johns Hopkins Univ.*) 1963. *Baltimore, Md.*

McBean, Alexander Marshall, A.B. (*Yale Univ.*) 1964. *Chatham, N.J.*

Marks, Richard Arlyn, A.B. 1965. *Urbana, Ill.*

Marshall, Robert Alan (*Oberlin Coll.*) *Dayton, Ohio*

*Miller, Richard Jay, A.B. (*Dartmouth Coll.*) 1964, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *West Hartford, Conn.*

Morain, William Douglas, A.B. (*Grinnell Coll.*) 1964. *Jefferson, Iowa*

*Mosher, Deane Fremont, Jr., A.B. (*Dartmouth Coll.*) 1965, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Newport, Vt.*

*Munro, Alan Bruce, A.B. (*Dartmouth Coll.*) 1965, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Freeport, N.Y.*
Nafziger, Jacob Calvin, A.B. (*Lehigh Univ.*) 1963. *Lancaster, Pa.*
Oakes, David Duane, A.B. 1963. *LaPorte, Ind.*
Oakes, Donna Gottdiener, A.B. (*Wellesley Coll.*) 1963. *Poughkeepsie, N.Y.*
Omachi, Rodney Seichi, A.B. (*Stanford Univ.*) 1964. *Stockton, Calif.*
Onion, Daniel Kent, A.B. 1964. *Castleton, Vt.*
Oredugba, Olumuyiwa, A.B. (*DePauw Univ.*) 1964. *Lagos, Nigeria*
Orkin, Fredrick Kent, A.B. (*Bowdoin Coll.*) 1964. *New York, N.Y.*
Patterson, Laird Gunn, A.B. (*Univ. of Kansas*) 1963. *Larned, Kans.*
Pauker, Stephen Gary, A.B. 1964. *Kingston, N.Y.*
Pearle, David Lee, A.B. (*Amherst Coll.*) 1964. *Dallas, Texas*
Peppercorn, Mark Allan, A.B. 1964. *Columbus, Ohio*
Perkins, David George, A.B. 1963. *Lynnfield*
Pincus, Stephanie Faith Hoyer, A.B. (*Reed Coll.*) 1964. *Beverly Hills, Calif.*
Podell, Richard Neal, A.B. (*Amherst Coll.*) 1964. *Malverne, N.Y.*
Pollard, Thomas Dean, A.B. (*Pomona Coll.*) 1964. *San Marino, Calif.*
Posner, Michael Kagan, A.B. (*Yale Univ.*) 1964. *Longmeadow*
Prager, Kenneth Michael, A.B. (*Columbia Univ.*) 1964. *Brooklyn, N.Y.*
Reale, Vincent Francis, A.B. (*Princeton Univ.*) 1963. *Manville, N.J.*
Reed, William Piper, Jr., A.B. 1964. *Reading*
*Reilly, Frank Eugene, A.B. (*Coll. of the Holy Cross*) 1960, A.M. (*Univ. of Wisconsin*) 1961, B.M.S. (*Dartmouth Coll.*) 1965. [Dartmouth Medical School]. *New York, N.Y.*
*Reising, Paul Andreas, Jr., A.B. (*Coll. of the Holy Cross*) 1964, B.M.S. (*Dartmouth Coll.*) 1966. [Dartmouth Medical School]. *New Orleans, La.*
Richards, Edith Gilkey, A.B. (*Wellesley Coll.*) 1964. *St. Louis, Mo.*
Rieder, Ronald Olrich, A.B. 1964. *Trenton, Mich.*
*Rini, James Martin, A.B. (*Dartmouth Coll.*) 1964, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Beachwood, Ohio*
Robertson, Howard Thomas, 2d, A.B. (*Colgate Univ.*) 1964. *Denver, Colo.*
Rosenberg, Gary Lawrence, A.B. 1964. *University Heights, Ohio*
Rutherford, Robert Carver, A.B. (*Univ. of Washington*) 1964. *Seattle, Wash.*

Sachs, David Howard, A.B. 1963. *Yonkers, N.Y.*
*Salisbury, Kent William, A.B. (*Dartmouth Coll.*) 1965, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Roslyn Heights, N.Y.*
Schneider, Bruce Solomon, A.B. 1964. *Teaneck, N.J.*
Seward, Paul North, A.B. (*Stanford Univ.*) 1964. *Washington, D.C.*
*Shapiro, Edward Robert, A.B. (*Yale Univ.*) 1962. [Stanford Univ. School of Medicine]. *Brookline*
*Sherman, Stephen Arthur, A.B. (*Dartmouth Coll.*) 1964. B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Stamford, Conn.*
Sloane, Robert Woodard, Jr., S.B. (*Univ. of Michigan*) 1963. *Wauwatosa, Wis.*
‡Soper, Michael Ray (*Harvard Coll.*) *Independence, Mo.*
Sos, Thomas Andrew, A.B. (*Queens Coll. of The City Univ. of New York*) 1964. *New York, N.Y.*
Southmayd, William Webster, A.B. 1964. *Newton Centre*
Starr, Stuart Eliot, A.B. (*Pomona Coll.*) 1963. *Los Angeles, Calif.*
Steinman, Ralph Marvin, B.SC. (*McGill Univ.*) 1963. *Sherbrooke, P.Q., Canada*
Sun, Edward Ralph, A.B. 1963. *Harrisburg, Pa.*
*Tegtmeier, Ronald Eugene, A.B. (*Dartmouth Coll.*) 1965, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Omaha, Nebr.*
Templeton, John Marks, Jr., A.B. (*Yale Univ.*) 1962. *Englewood, Calif.*
Tolkoff, Nina Ellen, A.B. (*Cornell Univ.*) 1964. *Brooklyn, N.Y.*
Trobe, Jonathan Daniel, A.B. 1964. *New York, N.Y.*
*Trowbridge, Frederick Lindsley, A.B. (*Princeton Univ.*) 1964, B.M.S. (*Dartmouth Coll.*) 1966. [Dartmouth Medical School]. *Willoughby, Ohio*
*Ungerer, Roland Hart, A.B. (*Dartmouth Coll.*) 1964, B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Stratford, Conn.*
*Vaughan, Milton Clay, A.B. (*Dartmouth Coll.*) 1964. B.M.S. (*ibid.*) 1966. [Dartmouth Medical School]. *Raleigh, N.C.*
*Vore, Jon Michael Brian, A.B. (*Colby Coll.*) 1964, B.M.S. (*Dartmouth Coll.*) 1966. [Dartmouth Medical School]. *Nashua, N.H.*
Ward, Samuel Porter, A.B. (*Amherst Coll.*) 1959. *Lake Bluff, Ill.*
Weil, Andrew Thomas, A.B. 1964. *Philadelphia, Pa.*
Welch, John Paton, A.B. 1964. *Belmont*
*Wilson, Samuel Hardy, Jr., A.B. (*Univ. of Denver*) 1961. [Univ. of Colorado School of Medicine]. *Ferris, Texas*

Wittes, Robert Elliot, A.B. 1964. *Woonsocket, R.I.*

+ *Wolf, Gerald Lee, S.B. IN MED. (*Univ. of Nebraska*) 1962, S.M. (*ibid.*) 1964, PH.D. (*ibid.*) 1965. [Univ. of Nebraska Coll. of Medicine]. *Sidney, Nebraska*

Yanowitz, Ira Sar, A.B. 1964. *Bronx, N.Y.*

Youngerman, Joseph Kahn, A.B. (*Yale Univ.*) 1964. *Champaign, Ill.*

*Zaia, John Anthony, A.B. (*Coll. of the Holy Cross*) 1964, B.M.S. (*Dartmouth Coll.*) 1966. [Dartmouth Medical School]. *Oneida, N.Y.*

Zawadsky, Peter Michael, A.B. (*Rutgers Univ.*) 1964. *Spotswood, N.J.*

## SECOND YEAR CLASS (1969)

Ainslie, George William, Jr., A.B. (*Yale Univ.*) 1965. *Binghamton, N.Y.*

Allen, Jeffrey Charles, A.B. (*Oberlin Coll.*) 1965. *Livingston, N.J.*

Arling, Bryan Jeremy, A.B. (*Univ. of Minnesota*) 1965. *Minneapolis, Minn.*

Bartrum, Royal Jay, Jr., A.B. (*Carleton Coll.*) 1965. *Normal, Ill.*

Bast, Robert Clinton, Jr., A.B. (*Wesleyan Univ.*) 1965. *Arlington, Va.*

Bean, Margaret Harvey, A.B.† (*Radcliffe Coll.*) 1965. *Iowa City, Iowa*

Bettman, Thomas Coulter, A.B. (*Dartmouth Coll.*) 1965. *Cincinnati, Ohio*

Bobroff, Lewis Martin, (*Brooklyn Coll. of The City Univ. of New York*). *Brooklyn, N.Y.*

Boehm, Sharon Lynne, S.B. (*Univ. of Wisconsin*) 1965. *Itasca, Ill.*

Braden, William, 3d, A.B. 1965. *New York, N.Y.*

Brandling-Bennett, Anthony David, A.B. 1964. *Los Angeles, Calif.*

Brooks, Benjamin Rix, A.B. 1965. *Merion Station, Pa.*

Brooks, Robert William, A.B. (*Williams Coll.*) 1965. *Paterson, N.J.*

Bulkley, Gregory Bartlett, A.B. (*Princeton Univ.*) 1965. *Winnetka, Ill.*

Burney, Richard Edward, Jr., A.B. 1965. *Cleveland, Ohio*

Burns, William Holmes, S.B. (*Yale Univ.*) 1965. *Macon, Ga.*

Burr, Winthrop Ames, A.B. 1965. *Christiansted, St. Croix, V.I.*

Carey, Edmund Lawrence, Jr., A.B. (*Coll. of the Holy Cross*) 1965. *Milton*

° Transferred to the second year class.

† Degree conferred by Harvard University.

N.B. Where the college name is omitted, the college is Harvard; where the state is omitted, the state is Massachusetts.

## STUDENTS

Cello, John Patrick, A.B. (*Providence Coll.*) 1965. *Cambria Heights, N.Y.*
Chang, Henry, S.B. (*Yale Univ.*) 1965. *New York, N.Y.*
Chessen, Douglas Howell, A.B. (*Amherst Coll.*) 1965. *Denver, Colo.*
Cloos, David Wilmot, A.B. (*Williams Coll.*) 1965. *Richmond Hill, N.Y.*
Cohen, Benjamin Emanuel, A.B. (*Columbia Univ.*) 1965. *Macon, Ga.*
Crane, Martin, A.B. (*Princeton Univ.*) 1965. *Williston Park, N.Y.*
Crichton, John Michael, A.B. 1964. *New Canaan, Conn.*
Dashe, Charles Kay, A.B. (*Univ. of Chicago*) 1965. *Gary, Ind.*
Dos Reis, Leslie Jose, A.B. (*Williams Coll.*) 1965. *Rye, N.Y.*
Duvinsky, Joel, S.B. (*City Coll. of The City Univ. of New York*) 1965. *New York, N.Y.*
Feibel, Robert Marks, A.B. (*Johns Hopkins Univ.*) 1965. *Cincinnati, Ohio*
Fernbach, Stephen Alton, A.B. (*Amherst Coll.*) 1965. *New York, N.Y.*
Frank, Gerald Warren, A.B. 1965. *Winthrop*
Fraser, David William, A.B. (*Haverford Coll.*) 1965. *George School, Pa.*
Freed, Curt Richard, A.B. 1965. *Euclid, Ohio*
Freeman, David Lewis, A.B. 1964. *Sherborn*
Freeman, Thomas Stanley, A.B. 1964. *Glencoe, Ill.*
Garrison, Penelope Knapp, A.B. †(*Radcliffe Coll.*) 1963. *Cambridge*
Gerber, Richard Borisow, A.B. (*Amherst Coll.*) 1965. *Washington, D.C.*
Gimbrone, Michael Anthony, Jr., A.B. (*Cornell Univ.*) 1965. *Buffalo, N.Y.*
Goldmann, Donald Alan, A.B. 1964. *Trenton, N.J.*
Gordon, Jerold Stanley, S.B. (*Antioch Coll.*) 1965. *Pittsburgh, Pa.*
Graybeal, Robert Thomas, S.B. (*Duke Univ.*) 1965. *Marion, Va.*
Grillo, Peter James, A.B. (*Yale Univ.*) 1965. *Andover*
Guyton, David Lee, S.B. (*Univ. of Mississippi*) 1965. *Jackson, Miss.*
Hall, John Henry, (*Reed Coll.*). *Portland, Oregon*
Hall, Stephen Vincent, A.B. 1965. *Champaign, Ill.*
Hallett, Mark, A.B. 1965. *Merion, Pa.*
Harper, Gordon Peacock, A.B. 1964. *Rochester, N.Y.*
Harrison, Michael Richard, A.B. (*Yale Univ.*) 1965. *Vancouver, Wash.*
Healy, Bernadine Patricia, A.B. (*Vassar Coll.*) 1965. *Long Island City, N.Y.*
Herbert, Marshall Linton, A.B. (*Wesleyan Univ.*) 1964. *Gainesville, Fla.*

Hertz, Barbara Bendel, A.B. (*Swarthmore Coll.*) 1965. *New York, N.Y.*
Hertzman, Marc, A.B. 1965. *Cincinnati, Ohio*
Hodes, David Samuel, A.B. (*Princeton Univ.*) 1963, B.A. (*Oxford Univ.*) 1965. *Manhasset, N.Y.*
Hodes, Richard Joel, A.B. (*Yale Univ.*) 1965. *Wantagh, N.Y.*
Hoffer, Edward Peter, S.B. (*Massachusetts Inst. of Technology*) 1965. *Montreal, P.Q., Canada*
Howard, Terry Thomas, A.B. (*Columbia Univ.*) 1965. *Rutherford, N.J.*
Hyde, Thomas Prentice, S.B. (*Yale Univ.*) 1965. *Evanston, Ill.*
Jablecki, Charles Kasmir, A.B. 1965. *Rumford, R.I.*
°Kahan, Morton Gerald, A.B. (*Princeton Univ.*) 1964. [Oxford Univ. Medical School]. *West Hartford, Conn.*
Kanner, Steven Russell, A.B. 1965. *Massapequa Park, N.Y.*
Kaslow, Richard Alan, A.B. (*Yale Univ.*) 1965. *Omaha, Nebr.*
Khoury, George, A.B. (*Princeton Univ.*) 1965. *Allentown, Pa.*
Kolb, Jonathan Edward, A.B. 1965. *Providence, R.I.*
Krogstad, Donald John, A.B. (*Bowdoin Coll.*) 1965. *New Hyde Park, N.Y.*
Lange, Roger Frederick, A.B. 1965. *Evanston, Ill.*
Langsdorf, David Stanton, Jr., A.B. (*Stanford Univ.*) 1963. *San Mateo, Calif.*
Lemkin, Stephen Richard, A.B. 1965. *Lowell*
Leonardi, Howard Kevin, A.B. (*Yale Univ.*) 1965. *Swampscott*
Levine, Judith Ann, A.B. (*Swarthmore Coll.*) 1965. *New York, N.Y.*
Levine, Robert Aaron, A.B. (*Yale Univ.*) 1965. *Waterville, Maine*
Lewis, Brian Joel, A.B. (*Rice Univ.*) 1965. *Little Rock, Ark.*
Lewis, Randall Jeffrey, A.B. (*Yale Univ.*) 1965. *Taunton*
Lipkin, Mack, Jr., A.B. 1965. *New York, N.Y.*
Liteplo, Merrill Gerald, S.B. (*Manhattan Coll.*) 1965. *Brooklyn, N.Y.*
Long, Michael Carroll, S.B. (*Massachusetts Inst. of Technology*) 1965. *Salisbury, Md.*
McLeod, Bruce Cameron, A.B. (*Univ. of Texas*) 1965. *Arkansas City, Kans.*
Marinoff, Gerald Paul, A.B. (*Columbia Univ.*) 1965. *Brooklyn, N.Y.*
Martin, David Hubert, A.B. (*Univ. of Kansas*) 1965. *Coffeyville, Kans.*
Mayer, Robert James, A.B. (*Williams Coll.*) 1965. *New Hyde Park, N.Y.*
Mieth, Werner Christian Joseph, A.B. 1965. *Union, N.J.*

Miller, John Bruce, A.B. 1965. *Maywood, Ill.*
Mitchell, Beverly Shriver, A.B. (*Smith Coll.*) 1965. *Auburndale*
Mitchell, Michael Ernst, A.B. (*Princeton Univ.*) 1965. *Lincoln Park, N.J.*
Morse, Herbert Carpenter, 3d, A.B. (*Oberlin Coll.*) 1965. *La Grange, Ill.*
Murphy, Frank Lloyd, Jr., A.B. 1965. *Webster Groves, Mo.*
Peterson, Douglas Bergen, A.B. (*Dartmouth Coll.*) 1965. *Aurora, Ill.*
Petrucelli, Rocco Joseph, 2d, A.B. (*Yale Univ.*) 1965. *Meriden, Conn.*
Quint, Alan Steven, A.B. 1965. *Woodbridge, N.J.*
Ré, Richard Noel, A.B. 1965. *Palisade, N.J.*
Redfern, Anne Brennan, A.B.† (*Radcliffe Coll.*) 1965. *Cincinnati, Ohio*
Rein, Michael Frank, A.B. 1965. *New York, N.Y.*
Richards, Keith Chirgwin, A.B. (*Yale Univ.*) 1965. *Akron, Ohio*
Rosenblum, Ruth Ellen, (*Wellesley Coll.*). *Los Angeles, Calif.*
Rottenberg, David Allan, A.B. (*Univ. of Michigan*) 1963, M.SC. (*Cambridge Univ.*) 1965. *Detroit, Mich.*
Scheinberg, Stephen, S.B. (*Massachusetts Inst. of Technology*) 1960, A.M. (*Princeton Univ.*) 1961, PH.D. (*ibid.*) 1963. *Memphis, Tenn.*
Schlenker, James David, A.B. 1965. *Peru, Ill.*
Schutz, James Scott, A.B. (*Yale Univ.*) 1965. *New York, N.Y.*
Schwartz, Ronald Harris, A.B. (*Cornell Univ.*) 1965. *Kenmore, N.Y.*
Seaman, William Ewing, A.B. (*Princeton Univ.*) 1964. *East Lansing, Mich.*
Silvio, Joseph Rocco, A.B. (*Cornell Univ.*) 1965. *Elizabeth, N.J.*
Snyder, Howard McCrum, 3d, A.B. (*Princeton Univ.*) 1965. *Atlanta, Ga.*
Spitz, Leslie Mike, A.B. 1965. *Wilmette, Ill.*
Stanberry, Mark Chauncy, S.B. (*Univ. of Arizona*) 1964. *Tucson, Ariz.*
Stelovich, Steve Dennis, A.B. 1963. *Salt Lake City, Utah*
Stephens, Joseph William, 3d, S.B. (*Emory Univ.*) 1965. *Macon, Ga.*
Tesar, Paul Louis, B.S. IN E.E. (*Univ. of Massachusetts*) 1964. *Flushing, N.Y.*
Thibault, George Edwin, Jr., A.B. (*Georgetown Univ.*) 1965. *Chittenango, N.Y.*
Thomas, Elizabeth Walke, A.B.† (*Radcliffe Coll.*) 1965. *Chevy Chase, Md.*
Tracy, David Mears, A.B. (*Yale Univ.*) 1965. *Pittsfield*

Trafton, Peter Grier, A.B. (*Yale Univ.*) 1965. *Auburn, Maine*
Tuffli, Charles Frederick, Jr., A.B. (*Yale Univ.*) 1965. *Menlo Park, Calif.*
Vickery, Donald Michael, A.B. 1965. *Vienna, Va.*
Workman, Robert Jay, A.B. (*Princeton Univ.*) 1964. *Staten Island, N.Y.*
Yurcisin, Daniel, A.B. (*Princeton Univ.*) 1965. *Roebling, N.J.*

## First Year Class (1970)

Ain, Jonathan David, A.B. (*Cornell Univ.*) 1966. *New York, N.Y.*
Akins, Cary Willard, A.B. 1966. *Red Wing, Minn.*
Albeck, Joseph Henry, A.B. (*Columbia Univ.*) 1966. *Brooklyn, N.Y.*
Anane-Sefah, John Camara (*Yale Univ.*) *Accra, Ghana*
Anderson, Frank Hughes, A.B. 1966. *Berwyn, Penna.*
Anderson, Thomas McDowell, Jr., A.B. (*Princeton Univ.*) 1966. *Arlington, Va.*
Angoff, Gerald Harvey, A.B. 1966. *Newton Centre*
Applegate, Clarence William, A.B. (*Oberlin Coll.*) 1966. *Tucson, Ariz.*
Ault, Kenneth Ashley, S.B. (*Massachusetts Inst. of Technology*) 1966. *Denver, Colo.*
Barkin, Roger Michael, A.B. (*Brandeis Univ.*) 1966. *Paris, France*
Bear, David Michael, A.B. 1965. *Akron, Ohio*
Bennett, Michael Isaiah, A.B. 1966. *Toronto, Ont., Canada*
Bennion, Lynn Jacobsen, A.B. 1966. *Palo Alto, Calif.*
Benson, James Wood, Jr., A.B. (*Stanford Univ.*) 1966. *Aptos, Calif.*
Berv, Kenneth Robert, A.B. (*Yale Univ.*) 1966. *Oceanside, N.Y.*
Blumenthal, Eileen, A.B. †(*Radcliffe Coll.*) 1966. *Oceanside, N.Y.*
Boetcher, David Allen, A.B. (*Princeton Univ.*) 1966. *Evanston, Ill.*
Bough, Edward William, S.B. (*Loyola Univ.*) 1966. *Chicago, Ill.*
Bours, William Alsop, IV, A.B. (*Stanford Univ.*) 1966. *Wilmington, Del.*
Breed, Robert Huntington, 2d, A.B. (*Yale Univ.*) 1966. *Poughkeepsie, N.Y.*
Breuer, Anthony Carl, A.B. (*Princeton Univ.*) 1965. *Princeton, N.J.*
Brondfield, Eric Steven, A.B. 1966. *Roslyn Heights, N.Y.*

† Degree conferred by Harvard University.
N.B. Where the college name is omitted, the college is Harvard; where the state is omitted, the state is Massachusetts.

Browne, Kay Frost Shaw, A.B. (*Mt. Holyoke Coll.*) 1966. *Cranbury, N.J.*
Camfield, Peter Robert, B.A. (*Queen's Univ.*) 1966. *Ottawa, Ont., Canada*
Cannon, Woodward, A.B. 1966. *Lincoln*
Citron, John Michael Tamor, A.B. (*Williams Coll.*) 1966. *North Miami, Fla.*
Clarke, Lewis John, A.B. 1966. *Buffalo, N.Y.*
Cohen, Philip, A.B. (*Columbia Univ.*) 1966. *Brooklyn, N.Y.*
Cooperman, Oliver Burton, A.B. (*Dartmouth Coll.*) 1966. *Fords, N.J.*
Crockett, David Shan, A.B. (*Cornell Univ.*) 1966. *Cincinnati, Ohio*
Davidoff, Ira Gordon, S.B. (*Massachusetts Inst. of Technology*) 1966. *Flushing, N.Y.*
Davies, John Anthony Kent, A.B. 1965. *Brookline*
Davis, Charles Abraham, S.B. (*Massachusetts Inst. of Technology*) 1966. *Greenburg, Penna.*
Dean, Peter Berridge, S.B. (*Cornell Univ.*) 1966. *Cincinnati, Ohio*
Dellinger, Evan Patchen, A.B. (*Swarthmore Coll.*) 1966. *Hampton, N.J.*
Di Giacinto, George Vincent, A.B. (*Columbia Univ.*) 1966. *Yonkers, N.Y.*
Dixon, Jonathan Allan, A.B. 1966. *Farmington, Conn.*
Duhme, David Ware, A.B. 1966. *St. Louis, Mo.*
Emans, John Barker, 2d, A.B. 1966. *Randolph, Vt.*
Ericsson, Charles Derwin, A.B. 1966. *Fairfax, Va.*
Fareed, George Carr, A.B. (*Univ. of California, Berkeley*) 1966. *Los Angeles, Calif.*
Ferber, Richard Alan, A.B. 1965. *Chicago, Ill.*
Fernbach, Barry Richard, A.B. (*Colgate Univ.*) 1966. *Valley Stream, N.Y.*
Fisher, Richard Ian, (*Harvard Univ.*). *Coral Gables, Fla.*
Folland, Edward Denton, A.B. (*Yale Univ.*) 1966. *Salt Lake City, Utah*
Fredlund, Paul Noel, A.B. 1966. *Minneapolis, Minn.*
Freedberg, Leonard Earl, A.B. 1965. *Brookline*
Friedenson, Daniel Jacob, A.B. (*Columbia Univ.*) 1966. *Brooklyn, N.Y.*
Gerson, Donald Edward, A.B. 1965. *Dayton, Ohio*
Girshon, Deanna P., A.B. (*Rutgers Univ.*) 1965. *Jersey City, N.J.*
Gittinger, John William, Jr., A.B. (*Oberlin Coll.*) 1966. *Annandale, Va.*

Goldman, Mitchell Howard, A.B. (*Brandeis Univ.*) 1966 *Quincy*
Goldsmith, George Hale, Jr., A.B. (*Washington Univ.*) 1966. *New Orleans, La.*
Good, Michael Ian, A.B. (*Univ. of Minnesota*) 1966. *New Ulm, Minn.*
Goodman, William Samuel, A.B. 1966. *Babylon, N.Y.*
Gottesman, Michael Marc, A.B. 1966. *Flushing, N.Y.*
Green, Mark Ronald, A.B. 1966. *South Norwalk, Conn.*
Greenblatt, David John, A.B. (*Amherst Coll.*) 1966. *Newton*
Groat, Robert Lanier, S.B. (*Davidson Coll.*) 1966. *Greensboro, N.C.*
Gross, Peter Lloyd, A.B. 1966. *Swampscott*
Gunderson, Paul Einar, A.B. 1966. *Enumclaw, Wash.*
Gustavson, Edward Ernest, A.B. (*Gustavus Adolphus Coll.*) 1966. *Northbrook, Ill.*
Hafner, Daniel James, A.B. (*Boston Univ.*) 1966. *Newell, S.D.*
Helpern, Joan Marilyn, A.B. †(*Radcliffe Coll.*) 1966. *New York, N.Y.*
Herriot, Sarah Jean, A.B. †(*Radcliffe Coll.*) 1966. *Palo Alto, Calif.*
Herzog, James Michael, A.B. 1965. *Lockport, N.Y.*
Howell, Stephen Barnard, A.B. (*Univ. of Chicago*) 1966. *Lexington*
Hyman, Frederic Evan, A.B. (*Columbia Univ.*) 1966. *Brooklyn, N.Y.*
Irwin, Charles Fayette, 3d, A.B. 1966. *Tipp City, Ohio*
Jamison, Wallace Glenn, S.B. (*Westminster Coll.*) 1966. *New Wilmington, Penna.*
Kempf, Raymond Andrew, A.B. (*Fordham Univ.*) 1966. *Utica, N.Y.*
Kern, David Evans, A.B. (*Princeton Univ.*) 1966. *Cincinnati, Ohio*
Kopf, Gary Sheldon, A.B. (*Columbia Univ.*) 1966. *Plainview, N.Y.*
Kulczycki, Anthony, Jr., A.B. (*Princeton Univ.*) 1966. *Easton, Penna.*
Landres, Richard Terry, A.B. (*Stanford Univ.*) 1966. *Encino, Calif.*
Lanken, Paul Nicholas, A.B. 1966. *Nutley, N.J.*
Lieber, Michael Maurice, A.B. 1966. *Arlington, Va.*
Lieff, Jonathan David, A.B. (*Yale Univ.*) 1966. *Newark, N.J.*
Lozner, Eugene Culver, A.B. (*Amherst Coll.*) 1966. *Syracuse, N.Y.*
Mackenzie, Thomas Brooke, A.B. 1966. *Denver, Colo.*
MacLean, Paul Donald, Jr., A.B. (*Yale Univ.*) 1965. *Potomac, Md.*
Meyers, Joel David, A.B. (*Dartmouth Coll.*) 1966. *Houston, Texas*
Millis, Michael Brian, A.B. 1966. *Toledo, Ohio*
Neaves, William Barlow, A.B. 1966. *Spur, Texas*
Noble, Robert Michael Courtney, B.SC. (*Univ. of British Columbia*) 1966. *Vancouver, B.C., Canada*
Oster, Charles Nelson, S.B. (*Univ. of Wisconsin*) 1966. *Beloit, Wisc.*

Ottesen, Eric Albert, A.B. (*Princeton Univ.*) 1965. *Cincinnati, Ohio*
Pashler, Josephine Elizabeth, A.B. †(*Radcliffe Coll.*) 1966. *Schenectady, N.Y.*
Pearlman, Alan Stuart, A.B. (*Williams Coll.*) 1966. *Rochester, N.Y.*
Peppercorn, Margaret Tova Bessin, A.B. †(*Radcliffe Coll.*) 1966. *New York, N.Y.*
Pierce, Ralph Wendell, A.B. 1966. *St. Louis, Mo.*
Pock, Randolph William, S.B. (*Allegheny Coll.*) 1966. *Coraopolis, Penna.*
Raaf, John Hart, A.B. 1963, DR.PHIL. (*Univ. of Oxford*) 1966. *Portland, Oregon*
Rabb, James Mark, A.B. 1966. *Cambridge*
Raskin, Stephen Paul, A.B. (*Brandeis Univ.*) 1966. *Silver Spring, Md.*
Ribner, Bruce Steven, A.B. (*Princeton Univ.*) 1966. *Brooklyn, N.Y.*
Richardson, John Marshall, A.B. 1966. *Tyler, Texas*
Robinson, Richard Allen, A.B. (*Rutgers Univ.*) 1966. *Levittown, Penna.*
Rogers, Jeffrey Langston, A.B. (*Dartmouth Coll.*) 1966. *Bethesda, Md.*
Romm, Fredric Jay, A.B. (*Columbia Univ.*) 1966. *Brooklyn, N.Y.*
Rosenfeld, Alvin A., A.B. (*Cornell Univ.*) 1966. *Brooklyn, N.Y.*
Rosenthal, Susan Nancy, A.B. †(*Radcliffe Coll.*) 1966. *Tenafly, N.J.*
Ross, Michael Elliot, A.B. (*Yale Univ.*) 1966. *Portland, Conn.*
Sandberg, Glenn Willard, Jr., A.B. (*Columbia Univ.*) 1966. *Denver, Colo.*
Schulman, Carol Ann Brimberg, A.B. †(*Radcliffe Coll.*) 1966. *Silver Spring, Md.*
Shelton, James Houston, A.B. 1966. *Dallas, Texas*
Simmons, Jeffrey Law, A.B. 1966. *Marblehead*
Simson, Michael Byron, A.B. 1966. *Grosse Pointe, Mich.*
Sklar, Marshall Dore, A.B. (*Brown Univ.*) 1966. *Camden, N.J.*
Smith, Howard Gary, A.B. (*Princeton Univ.*) 1966. *Pittsburgh, Penna.*
Soll, Andrew H., A.B. (*Pomona Coll.*) 1966. *Los Angeles, Calif.*
Solomons, Noel Willis, A.B. 1966. *Cambridge*
Stein, Richard Steven, A.B. 1966. *Lincolnwood, Ill.*
Stevens, Rose Marie, A.B. (*Manhattanville Coll. of the Sacred Heart*) 1966. *Rochester, Mich.*
Tenney, James Hugh, A.B. 1966. *Briarcliff Manor, N.Y.*
Tew, Richard Harry, A.B. (*Univ. of Washington*) 1966. *Richland, Wash.*

Veazey, James Marion, Jr., S.B. (*Massachusetts Inst. of Technology*) 1966. *Decatur, Ga.*

Warren, John Windiate, A.B. (*Univ. of Michigan*) 1966. *Wichita, Kans.*

Weens, Joan Harriet, A.B. †(*Radcliffe Coll.*) 1966. *Atlanta, Ga.*

Weiler, Mary Margaret, A.B. (*Vassar Coll.*) 1966. *Burt, N.Y.*

Weissman, Jack Burton, A.B. (*New York Univ.*) 1966. *Brooklyn, N.Y.*

Wilkoff, William Gordon, A.B. (*Dartmouth Coll.*) 1966. *Pleasantville, N.Y.*

Williams, Sankey Vaughan, A.B. (*Princeton Univ.*) 1966. *Nicholasville, Ky.*

Wyler, David John, A.B. (*Brown Univ.*) 1966. *Scarsdale, N.Y.*

Yee, Robert Donald, A.B. 1966. *San Francisco, Calif.*

MEDICAL SCHOOL SUMMARY 1966–1967
(as of registration September 1966)

| | |
|---|---|
| Fourth Year | 151 |
| Third Year | 143 |
| Second Year | 114 |
| First Year | 125 |
| Total | 533 |

## Colleges Represented

| | |
|---|---|
| Allegheny College | 2 |
| Amherst College | 18 |
| Antioch College | 1 |
| Arizona, University of | 1 |
| Arlington State College | 1 |
| Barnard College | 3 |
| Bates College | 1 |
| Bennington College | 1 |
| Boston College | 1 |
| Boston University | 2 |
| Bowdoin College | 2 |
| Brandeis University | 4 |
| British Columbia, University of | 1 |
| Brooklyn College of The City University of New York | 5 |
| Brown University | 2 |
| Bryn Mawr College | 1 |
| Bucknell University | 1 |
| California Institute of Technology | 1 |
| California, University of (at Berkeley) | 2 |
| Carleton College | 4 |
| Chicago, University of | 5 |
| City College of The City University of New York | 1 |
| Colby College | 2 |
| Colgate University | 3 |
| Colorado, University of | 1 |
| Columbia University | 19 |
| Cornell University | 13 |
| Dartmouth College | 40 |
| Davidson College | 1 |
| Dayton, University of | 1 |
| Denison University | 1 |
| Denver, University of | 1 |
| DePauw University | 1 |
| Drake University | 1 |
| Duke University | 1 |
| Emory University | 1 |
| Fordham University | 2 |
| Georgetown University | 2 |
| Grinnell College | 1 |
| Gustavus Adolphus College | 1 |
| Hamilton College | 1 |
| Harvard University | 145 |
| Haverford College | 3 |
| Hawaii, University of | 1 |
| Holy Cross, College of the | 10 |
| Iowa, State University of | 1 |
| Johns Hopkins University | 4 |
| Kansas, University of | 2 |
| Kansas State University | 1 |
| Lehigh University | 1 |
| Loyola University (Chicago) | 1 |
| McGill University | 1 |
| Manhattan College | 1 |
| Manhattanville College of the Sacred Heart | 1 |
| Massachusetts, University of | 1 |
| Massachusetts Institute of Technology | 14 |
| Michigan, University of | 4 |
| Middlebury College | 1 |
| Minnesota, University of | 2 |
| Mississippi, University of | 1 |
| Mount Holyoke College | 1 |
| New Hampshire, University of | 1 |
| New York University | 1 |
| North Dakota, University of | 1 |
| Oberlin College | 8 |
| Ohio State University | 1 |
| Oklahoma City University | 1 |
| Oregon, University of | 1 |
| Pennsylvania, University of | 1 |
| Pomona College | 4 |
| Princeton University | 36 |
| Providence College | 2 |
| Queens College of The City University of New York | 1 |
| Queen's University | 1 |
| Radcliffe College | 19 |
| Reed College | 2 |
| Rensselaer Polytechnic Institute (New York) | 1 |
| Rice University | 1 |
| Rochester, University of | 2 |
| Rutgers University | 4 |
| St. John's College (Maryland) | 1 |
| St. Louis University | 1 |

| | |
|---|---|
| Smith College | 1 |
| Stanford University | 8 |
| Swarthmore College | 5 |
| Texas, University of | 2 |
| Tufts University | 1 |
| Union College | 3 |
| Vassar College | 2 |
| Vermont, University of | 1 |
| Virginia, University of | 1 |
| Washington, University of | 2 |
| Washington University | 1 |
| Wellesley College | 5 |
| Wesleyan University | 2 |
| Western Reserve University | 1 |
| Westminster College (Pennsylvania) | 1 |
| Williamette University | 1 |
| Williams College | 12 |
| Wisconsin, University of | 2 |
| Yale University | 43 |
| Yankton College | 1 |
| Yeshiva University | 1 |
| Total | 535 |
| Counted more than once | 2 |
| Total number of students | 533 |
| Entered advanced standing | 78 |
| Number of colleges represented | 103 |
| Number of college graduates | 520 |
| Number of non-graduates | 13 |

## Medical Schools Represented by Students Who Entered Harvard Medical School with Advanced Standing

| | |
|---|---|
| Colorado, University of School of Medicine | 1 |
| Columbia University College of Physicians and Surgeons | 1 |
| Dartmouth Medical School | 66 |
| New York University School of Medicine | 1 |
| North Dakota, University of, School of Medicine | 2 |
| Oxford University Medical School (England) | 3 |
| South Dakota, University of, School of Medicine | 1 |
| Stanford University School of Medicine | 2 |
| Virginia, School of Medicine | 1 |
| Total | 78 |
| Total number of students admitted to first year standing | 455 |
| Total | 533 |

## Medical Students on Leave of Absence for Research and Special Study

1966–1967

Joseph Stephen Alpert
William Ira Bennett
Rishon Menahem Bialer
John Albert Bissell
Arthur William Boylston
Alfred Lewis Goldberg
John Edward Heuser
Charles Alderson Janeway, Jr.
Patrick Hayne Mattingly
David Smith Oyer
Michael Stewart Stulbarg
John Vincent Walsh, Jr.
John Newman Weinstein

## SCHOOL OF DENTAL MEDICINE

### STAFF

Minoru Abe, M.D., Research Fellow in Pharmacology.

Barry J. Agranat, D.M.D., Assistant in Oral Surgery.

John T. Albright, D.D.S., Clinical Associate in Oral Pathology.

Myron Allukian, Jr., D.D.S., Research Fellow in Ecological Dentistry.

Benjamin H. Amdur, Ph.D., Research Associate in Biological Chemistry at the Forsyth Dental Infirmary for Children.

Melvin A. Andell, D.D.S., Instructor in Orthodontics.

David T. Armstrong, Ph.D., Associate in Anatomy in the School of Dental Medicine.

Douglas A. Atwood, M.D., D.M.D., Clinical Associate in Prosthetic Dentistry.

Herbert I. Bader, D.D.S., Research Fellow in Periodontology.

Harry K. Bailey, D.M.D., Instructor in Operative Dentistry.

Laurence I. Barsh, D.M.D., Instructor in Operative Dentistry.

Robert E. Binder, D.M.D., Research Fellow in Orthodontics.

James A. Bond, D.D.S., Research Fellow in Orthodontics.

Donald F. Booth, D.M.D., Assistant in Dental Medicine.

Edgar S. Bradley, D.D.S., Teaching Fellow in Pediatric Dentistry.

Finn Brudevold, D.D.S., Professor of Dentistry at the Forsyth Dental Infirmary for Children.

Norman T. Budde, D.M.D., Instructor in Pediatric Dentistry.

Duane F. Carbone, D.M.D., Instructor in Dental Medicine.

Richard S. Carroll, Ph.D., Assistant to the Dean of the School of Dental Medicine for Planning and Development.

George Christman, D.M.D., Instructor in Oral Surgery.

Carl G. Cohen, D.M.D., Instructor in Pediatric Dentistry.

Melvin I. Cohen, D.M.D., Associate Clinical Professor of Orthodontics.

Vera Coklica, D.D.S., Research Fellow in Dental Medicine.

Willard A. Coy, D.M.D., Instructor in Prosthetic Dentistry.

Miles A. Crenshaw, Ph.D., Instructor in Physiology at the Forsyth Dental Infirmary for Children.

Tabajara Gaucho Da Costa, D.D.S., Research Fellow in Dental Medicine.

Vincent DeAngelis, D.M.D., Research Fellow in Orthodontics.

Herman De Wilde, M.D., D.M.D., Clinical Associate in Oral Surgery.

I. Leon Dogon, L.D.S., D.M.D., Associate in Operative Dentistry at the Forsyth Dental Infirmary for Children.

Joel P. Douglas, D.M.D., Instructor in Orthodontics.

John D. Doykos, 3d, D.M.D., Assistant in Pediatric Dentistry.

James M. Dunning, D.D.S., M.P.H., Professor of Ecological Dentistry.

Joel Dunsky, D.D.S., Instructor in Dental Medicine.

Harold L. Ehrlich, D.M.D., Assistant Clinical Professor of Prosthetic Dentistry.

Henry D. Epstein, D.M.D., Clinical Associate in Periodontology.

James W. Etherington, D.M.D., Assistant Clinical Professor of Operative Dentistry.

Robert E. Evans, D.M.D., Teaching Fellow in Dental Medicine.

David J. Farrell, D.M.D., Assistant Clinical Professor of Prosthetic Dentistry.

Robert W. Fasciano, D.M.D., Instructor in Periodontology.

Norton Fishman, D.M.D., Instructor in Prosthetic Dentistry.

George Freedman, M.A., Lecturer on Prosthetic Dentistry.

Stephen H. Gamm, D.M.D., Research Fellow in Orthodontics.

Philias R. Garant, D.M.D., Research Fellow in Periodontology.

Ronald J. Gellert, Ph.D., Research Fellow in Physiology in the School of Dental Medicine.

Irwin I. Getz, D.D.S., Instructor in Prosthetic Dentistry.

Ronald J. Gibbons, Ph.D., Assistant Professor of Bacteriology at the Forsyth Dental Infirmary for Children.

Donald B. Giddon, D.M.D., Lecturer on Ecological Dentistry.

Robert L. Glass, D.M.D., Dr.P.H., Associate Clinical Professor of Ecological Dentistry and Director of Clinical Services.

Harold S. Gold, D.M.D., Instructor in Prosthetic Dentistry.

Paul Goldhaber, D.D.S., Associate Professor of Periodontology and Tutor in Dental Sciences.

Joel Goldin, D.M.D., Instructor in Prosthetic Dentistry.

Lorne M. Golub, D.M.D., Research Fellow in Periodontology.

Dwight F. Gordon, Ph.D., Research Fellow in Bacteriology at the Forsyth Dental Infirmary for Children.

George David Gordon, D.M.D., Research Fellow in Periodontology.

Hideo Goto, D.D.S., Research Fellow in Orthodontics.

Louis Harvey Green, D.M.D., Research Fellow in Periodontology.

Ronald Alan Greenspan, D.D.S., Research Fellow in Orthodontics.

Roy O. Greep, Ph.D., D.Sc. (hon.), Professor of Anatomy in the School of Dental Medicine and Dean.

Anna-Marie Grøn, D.D.S., Associate in Orthodontics at the Forsyth Dental Infirmary for Children.

Poul Grøn, D.D.M., Assistant Professor of Dentistry at the Forsyth Dental Infirmary for Children.

Walter C. Guralnick, D.M.D., Associate Clinical Professor of Oral Surgery.

Stephen H. Halem, D.M.D., Research Fellow in Dental Medicine

Lewis B. Harden, D.M.D., Teaching Fellow in Dental Medicine.

E. Robert Haynes, D.M.D., Instructor in Operative Dentistry.

John W. Hein, D.M.D., Ph.D., Professor of Dentistry at the Forsyth Dental Infirmary for Children and Director, Forsyth Dental Infirmary for Children.

Francisco Hernandez-Oquendo, D.M.D., M.P.H., Research Fellow in Ecological Dentistry.

Terrence D. Hoover, D.M.D., Instructor in Pediatric Dentistry.

Louise W. Hord, B.S., Lecturer on Ecological Dentistry.

Minoru Horiuchi, D.M.D., Instructor in Dental Medicine.

James T. Irving, Ph.D., M.D., Professor of Physiology at the Forsyth Dental Infirmary for Children.

Theodore M. Jackanicz, Ph.D., Research Fellow in Biological Chemistry in the School of Dental Medicine.

Leif B. Johannessen, D.M.D., Research Associate in Dental Medicine.

Ronald Johnson, D.D.S., Research Fellow in Pediatric Dentistry.

Anthony Jong, D.D.S., Research Fellow in Ecological Dentistry (from September 15, 1965).

Paul J. Kalis, D.M.D., Assistant in Periodontology.

Edward F. Kastelic, D.D.S., Research Fellow in Ecological Dentistry.

Paul Landis Keyes, Ph.D., Research Fellow in Anatomy in the School of Dental Medicine.

Francis B. T. H. Khouw, D.M.D., Research Fellow in Orthodontics.

Peter G. Kimball, D.M.D., Assistant in Dental Medicine.

Ronald N. Kozlowski, D.D.S., Research Fellow in Pediatric Dentistry.

Alvin A. Krakow, D.D.S., Instructor in Dental Medicine.

Walter S. Krawczyk, D.D.S., Research Fellow in Dental Medicine.

Mladen M. Kuftinek, D.M.S., Research Fellow in Orthodontics.

Donald L. Leake, D.M.D., Research Fellow in Dental Medicine.

Jesse C. Leatherwood, A.B., Administrative Assistant to the Dean of the School of Dental Medicine.

Clement S. C. Lear, B.D.S., D.M.D., Associate in Orthodontics at the Forsyth Dental Infirmary for Children.

Laure Lebret, D.F.M.P., Associate in Orthodontics at the Forsyth Dental Infirmary for Children.

Gary S. Leske, D.D.S., Research Fellow in Ecological Dentistry.

Eugene A. Lewis, D.D.S., Research Fellow in Orthodontics.

Robert C. Lincoln, D.M.D., Instructor in Oral Surgery.

John B. Little, M.D., Assistant Professor of Radiobiology.

Arthur V. Lombardi, D.D.S., Research Fellow in Orthodontics.

Paul K. Losch, D.D.S., Associate Professor of Pediatric Dentistry at The Children's Hospital and Chief of the Dental Service at The Children's Hospital Medical Center.

Gordon J. Macdonald, Ph.D., Research Associate in Physiology in the School of Dental Medicine.

Robert J. Matusow, D.M.D., Instructor in Operative Dentistry.

Edwin S. Mehlman, D.D.S., M.Sc.D., Instructor in Dental Medicine.

Gilbert H. Meyer, Jr., D.M.D., Research Fellow in Orthodontics.

Steven A. Miller, D.M.D., Assistant in Periodontology.

Peter B. Mills, D.D.S., Research Fellow in Orthodontics.

Richard L. Miner, D.D.S., Instructor in Oral Surgery.

Coenraad F. A. Moorrees, D.D.S., Professor of Orthodontics at the Forsyth Dental Infirmary for Children.

Edward M. Morin, D.M.D., Instructor in Orthodontics.

James E. Mulvihill, D.M.D., Research Fellow in Periodontology.

Richard L. Myerson, M.S., Lecturer on Prosthetic Dentistry.

John Nalbandian, D.M.D., Assistant Professor of Operative Dentistry.

J. Howard Oaks, D.M.D., Lecturer on Dentistry, Tutor in Medical Science, and Associate Dean of the School of Dental Medicine for Student Affairs.

Peter Ofner, Ph.D., Research Associate in Pharmacology in the School of Dental Medicine.

Gerald L. O'Neill, D.M.D., Lecturer in Operative Dentistry.

Alan B. Perkin, D.D.S., Research Fellow in Periodontology.

E. Albert Petersen, D.M.D., Assistant in Pediatric Dentistry.

Bela E. Piacsek, Ph.D., Research Fellow in Physiology in the School of Dental Medicine.

Earle H. Rosenberg, D.M.D., Instructor in Dental Medicine.

Julian M. Rothblatt, D.M.D., Instructor in Orthodontics.

Stephen S. Rothman, D.D.S., Ph.D., Instructor in Physiology in the School of Dental Medicine.

Eiko Sairenji, D.M.S., Research Associate in Dentistry.

Christian Schwabe, D.D.S., Ph.D., Associate in Biological Chemistry in the School of Dental Medicine.

Aly M. Sharawy, F.D.S.R.C.S., Research Fellow in Dental Medicine.

James H. Shaw, Ph.D., Professor of Nutrition in the School of Dental Medicine.

Masaharu Shimizu, D.D.S., Research Fellow in Periodontology.

Leonard B. Shulman, D.M.D., Research Associate in Oral Surgery.

Sigmund S. Socransky, D.D.S., Assistant Professor of Periodontology at the Forsyth Dental Infirmary for Children.

Rune S. A. Söremark, D.D.S., Ph.D., Visiting Professor of Dentistry.

James H. Sowles, D.M.D., Instructor in Operative Dentistry.

Ralph B. Sozio, D.M.D., M.S., Instructor in Prosthetic Dentistry.

Morton Speck, D.M.D., Instructor in Orthodontics.

J. Henry Stempien, D.M.D., Assistant in Dental Medicine.

Burt D. Stern, D.M.D., Associate in Periodontology.

Joseph M. Stolman, D.M.D., M.S., Instructor in Periodontology.

Stephen Stone, D.M.D., Assistant in Periodontology.

Moses S. Strock, D.M.D., Associate Clinical Professor of Dental Medicine.

Peter E. Strock, D.D.S., Research Fellow in Dental Medicine.

Lennard T. Swanson, D.M.D., Clinical Associate in Orthodontics.

Edward A. Sweeney, D.M.D., Associate in Pediatric Dentistry.

Armen H. Tashjian, Jr., M.D., Assistant Professor of Pharmacology in the School of Dental Medicine.

G. Earl Thompson, D.M.D., Clinical Professor of Operative Dentistry.

Myron J. Van Leeuwen, D.D.S., Assistant Clinical Professor of Operative Dentistry.

Vito Vrbic, D.M.D., Research Fellow in Dental Medicine.

John T. Waldron, Jr., D.D.S., Research Fellow in Orthodontics.

Robert J. Watson, D.M.D., Teaching Fellow in Pediatric Dentistry.

Robert F. Watton, D.M.D., Lecturer on Pediatric Dentistry.

Melvyn Weinstock, D.D.S., Research Fellow in Orthodontics.

William D. Wellock, D.M.D., M.P.H., Lecturer on Ecological Dentistry.

## SCHOOL OF DENTAL MEDICINE

Herbert Wells, D.M.D., Assistant Professor of Dentistry, Tutor in Medical Science, and Director of the Clinic.

Philip H. White, D.M.D., Lecturer on Oral Surgery.

William L. Wilson, D.M.D., Lecturer on Orthodontics.

Roy E. Wuthier, Ph.D., Associate in Biological Chemistry at the Forsyth Dental Infirmary for Children.

Peter K. Yen, D.M.D., Clinical Associate in Orthodontics.

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Affiliated:

Albert L. Jones, M.D., Instructor in Anatomy.

John A. Long, Ph.D., Research Fellow in Anatomy.

Eugene J. Nathan, L.L.B., Associate Director of Development of the Faculty of Medicine.

U. Ingrid Richardson, Ph.D., Research Fellow in Pharmacology.

Herbert A. Shaw, A.B., Director of Medical Information with the University News Office.

George F. Wilgram, M.D., Ph.D., Assistant Professor of Dermatology.

## ANNOUNCEMENT OF COURSES

During the first two academic years, dental and medical students pursue courses of study that are alike in philosophy and objectives but that differ in content. Special exercises have been devised for dental and medical students to illustrate for each group how the basic sciences serve their respective professions. Tutorial study of dental students is under the direction of the dental staff.

As the entering classes are limited, it is possible to reduce the time usually involved in courses of dental techniques. Individual instruction, demonstrations, seminars, and conferences replace the traditional lecture system to a large degree.

A program to instruct third and fourth year students in effective use of ancillary dental personnel provides experience for each student in the performance of clinical procedures with the aid of a trained dental assistant or hygienist. Auxiliary personnel are also utilized to relieve the student of a variety of routine but time-consuming tasks.

Introduction to the Health Sciences. First year. First two weeks after Labor Day. Professor Shaw. Drs. Sweeney, Wuthier, Carbone, and Guest Lecturers.

In this laboratory and lecture course, selected fundamental concepts learned in college sciences are considered in relation to health and disease in man as demonstrations of the vital relevance of scientific information for the understanding and solving of biological problems by the student and the dentist.

Oral Histology and Pathophysiology. Second year. Dr. Goldhaber and Associates.

A seminar and laboratory course devoted primarily to the growth and development of the tooth and surrounding structures and the pathology of these tissues. Special lectures concerning biochemistry, physiology, experimental pathology, and epidemiology are included.

Fundamentals of Occlusion. Third year. Dr. Epstein and Associates.

This course represents a combined effort of many disciplines to provide basic information on the stomatognathic system as a background for an understanding of occlusion.

Dental Anatomy. First semester, third year. Assistant Professors Van Leeuwen and Nalbandian.

Instruction in dental anatomy and tooth morphology. Special emphasis is placed on individual tooth form and the relationship of the tooth in the dental arch to adjacent teeth, opposing teeth and supporting tissue. Technique practice in reproduction of tooth form is stressed using natural extracted teeth.

Nutrition. Third year. Professor Shaw and Dr. Sweeney.

Discussion of relations of nutrition to the development, maturation and maintenance of the oral tissues. Discussion of nutritional requirements, relative values of various foods and the preparation of diet histories. Clinic practice in the evaluation of diet histories and in the development of suitable recommendations for the patient.

Oral Histopathology. Third year. Associate Professor Goldhaber; Drs. Nalbandian, Stern, Stone, and Kalis.

The course consists of weekly two hour sessions composed of lectures, laboratory and student reports on the literature. The subject matter includes the histology and pathology (light microscopy and electron microscopy) of teeth and pulp, periodontium, oral mucosa, salivary glands and bone. Attempts are made to correlate the microscopic picture with the clinical findings. Emphasis is placed on experimental pathology.

Dental Medicine. Third and fourth years. Associate Professor Guralnick, Drs. Agranat, Carbone, Krawczyk, Leake, Rosenberg, P. Strock.

A course devoted to the diagnosis and treatment of oral diseases, i.e., diseases of the periodontium, dental pulp, oral mucosa and other oral structures together with their correlation to systemic conditions. Lectures, seminars, clinical practice and observation are given both in the School Dental Clinic and at the Massachusetts General Hospital. Assignments are also made at the Peter Bent Brigham Hospital.

Infirmary procedures, identification of oral structures, methods of oral examination, history taking, and common methods of diagnosis for dental and oral disease are given in both years, supplemented by practice in the general clinic.

Ecological Dentistry. Third and fourth years. Professor Dunning and Associate Clinical Professor Glass; Drs. Hunt, Giddon, and

Wellock of the School of Dental Medicine; Dr. Baldwin of the Forsyth Dental Center; Drs. Schmidt, Pechansky, and Young of the School of Public Health; and Dr. King of the University Health Services.

The goal of this Department is to relate dentistry to the environment in which dental diseases occur and in which dentists must work. The teaching program of the Department includes application of statistical methods to the problems of dental disease in population groups, the place of various types of disease prevention, the relation of the dentist to society, and the scope of dentistry in comprehensive health service.

In the third year, the course begins with material on behavior problems of patients, especially children. Next comes a section on biostatistics, a continuation from material presented earlier. Preventive dentistry, epidemiology of dental disease, and the educational, cultural, and organizational problems of dental public health programs occupy the rest of the year. Visits are made to a fluoridation installation and a health center. Caries control procedures are carried out with selected clinic patients. Following this year's instruction, the student makes a survey of the health resources in a community of his choice.

In the fourth year, psychosocial problems in dentistry are taken up first. Then comes material on organization and financing of dental care programs, dental practice management, ethics and jurisprudence. Interview techniques and further caries control procedures are carried out with clinic patients.

Endodontics. Third and fourth years. Dr. Matusow and Associates.

In the third year, the student learns a clinical interpretation of pulpal and periapical disease, with a rationale for root canal therapy. Fundamental concepts in pathology, bacteriology and other preclinical sciences are correlated with the course. Basic endodontic procedures are introduced through lectures, laboratory techniques, and clinical demonstrations prior to the treatment of patients.

In the fourth year, clinical experience is amplified with lectures, seminars, and case discussions. More complex endodontic procedures, in addition to periapical surgery, are introduced.

Throughout the course, the integration of endodontics with re-

lated dental disciplines is emphasized. The student obtains a perspective of the subject as a part of the total oral health picture.

Operative Dentistry. Third and fourth years. Assistant Professor Nalbandian; Drs. Thompson, Etherington, Van Leeuwen, Dogon, Bailey, Haynes, Matusow, and Sowles.

Throughout the two year course, emphasis is placed upon early student-patient contact with immediate clinical application of treatment procedures. In the third year, instruction is given in oral hygiene and the clinical aspects of caries and other dental diseases. By way of lectures, demonstrations, and individual chairside discussions, the student develops proficiency in examination, diagnosis, and treatment planning. Most of the current techniques of cavity preparation utilizing conventional and high speeds are given, in conjunction with study of the various types of restorative materials.

In the fourth year, gold foil restorations are taught; some recently developed procedures are introduced and clinical practice in all phases of operative dentistry continues.

Oral Surgery. Third and fourth years. Associate Professor Guralnick, Drs. Agranat, Booth, Christman, De Wilde, Evans, Kimball, Lincoln, Miner, Olin, Rosenberg, Shulman, Stempion, and White.

Early in the third year the students receive instruction in the basic operative techniques of general and oral surgery at the surgical laboratories of the Massachusetts General Hospital. These preliminary exercises are followed by lectures, seminars, and clinical practice of oral surgery and anesthesiology at the School of Dental Medicine clinic.

In the fourth year students are assigned to the Massachusetts General Hospital as clinical clerks on the Dental Service. At the hospital more extensive surgery of the oral cavity including traumatic injuries to the face and jaws is observed. The student takes active part in the study and treatment of such cases. Additional training in oral surgery is made available at the Boston City Hospital.

Orthodontics. Third and fourth years. Professor C. F. A. Moorrees; Drs. A. M. Grøn, Lear, Lebret, Swanson, and Douglas.

The treatment of patients with different occlusal anomalies, in collaboration with postgraduate Fellows, provides a means to become

thoroughly familiar with clinical aspects of orthodontics during the third and fourth years. This experience adds a measure of perspective for the theoretical part of the course that consists of lectures, seminars, and diagnostic conferences. Emphasis is placed on growth and development, cephalometrics, as well as specific phases of genetics, biostatistics, anthropology and histology. Clinical demonstrations and laboratory technique exercises serve to enhance comprehension of treatment procedures. Patients are obtained from the Forsyth Dental Infirmary for Children, while the cleft palate clinic of the Children's Hospital Medical Center collaborates in the teaching efforts. The over-all objective of the course is to develop sound judgment as a basis for diagnosis and care of children in clinical practice.

Pediatric Dentistry. Third and fourth years. Associate Professor Losch; Drs. Budde, Hoover, C. Cohen, Petersen and Watton.

Lectures and demonstrations introduce the subject in the third year with emphasis on the physical and psychological development of the child. During the pedodontic clinic, the student practices routine dental care for children. Treatment planning and an understanding of dental development are stressed.

The fourth year student continues to practice in the pedodontic clinic. Lectures and clinic procedures now stress the preventive aspects in children's dentistry, especially patient and parent education in oral hygiene and personal caries control as well as space maintenance, correction of oral habits, and tooth guidance.

In addition, the senior student visits the Dental Department of the Children's Hospital Medical Center where he is exposed to the management of the unusual cases best seen in a hospital atmosphere, as well as observing dental rehabilitation procedures performed by the hospital dental staff in the main operating rooms. Special emphasis is given those patients whose systemic disease includes oral manifestations.

Periodontics. Third and fourth years. Associate Professor Goldhaber; Drs. Epstein, Nalbandian, Stern, Fasciano, Kalis, Miller, and Stone.

The student is taught to recognize and diagnose periodontal disease and to comprehend its pathogenesis. He is expected to understand the role of local etiological factors as well as the part played by systemic disease in modifying tissue response to local irritations.

With regard to therapy, emphasis is placed on the elimination of local factors and the institution of preventive procedures. In addition, he is taught the principles of occlusal equilibration and splinting of loose teeth. All students are required to perform periodontal surgery.

Prosthetic Dentistry. Third and fourth years. Visiting Professor Söremark; Drs. Ehrlich, Farrell, Atwood, Fishman, Gold, Goldin, Getz, and Kushnir.

Prosthetic dentistry which includes complete, fixed and removable prosthesis is taught in the third and fourth years. Through lectures, conferences and demonstrations the student receives clinical and laboratory instruction in the anatomy and physiology of the mouth as it applies to prosthetic dentistry, and in the materials and techniques of prosthetic restoration directed toward oral health, function and aesthetics. Every effort is made to provide early clinic contacts and to teach techniques on clinic cases. The high teacher-student ratio, small classes and special physical facilities favor this type of instruction.

Research Project. Third and fourth years. Dr. Wells and Others.

In order to gain a more realistic appreciation of the nature of scientific research, all students of the Harvard School of Dental Medicine, as a requirement for graduation, participate in a laboratory or clinical investigation of their own choosing. By the end of the first semester of the third year, the student has chosen a research supervisor from the faculty and the subject to be investigated. He presents a plan for his research project in the form of a seminar at the beginning of the second semester. During the rest of the third year, and in some cases during the summer months, he attempts to master the techniques necessary for his work. During the fourth year, with the advice and aid of the faculty research supervisor, the project is carried forward, and at the end of the year, the student presents a seminar summarizing his results. Both the third and fourth year seminars are also required in written form for permanent reference in the Library.

Roentgenology. Third and fourth years. Visiting Professor Söremark and Dr. DeWilde.

Principles of applied roentgenology and the interpretation of radiographs, with consideration of the electro-physical basis of roentgen-

ology, are covered in the third year. Practice in radiological technique and interpretation is given in both years.

Surgical Anatomy of the Head and Neck. Fourth year elective offered to selected students for two full weeks in February. Assistant Clinical Professor Guralnick and Dr. Edwards from the Medical School.

The course is designed primarily to enable the student through his own dissections to gain knowledge of the anatomy of operative oral surgery.

The first week is spent in doing eight regional dissections. The second week is devoted to performing specific surgical procedures with emphasis on anatomical dissection. The laboratory exercises are supplemented by lectures and by the use of motion pictures.

Eligibility for admission is determined by the Fourth Year Promotion Board to whom application should be made by letter prior to December first of the senior year.

## Course for Dental Graduates

The following course is given in cooperation with the Committee on Courses for Graduates of the Faculty of Medicine.

Dental Medicine 1. Dr. Roy O. Greep and Associates.

This course is designed for dental teachers, foreign students of special ability, and others who wish to combine clinical study with elective research in the laboratories of the School. Only a very small number of students will be admitted. Curriculum will be designed to meet individual needs and the entire facilities of the School may be utilized. Tuition will be at the rate of $2000 annually.

Four or eight months, October through January and/or February through May; daily, all day, except Saturday afternoons. Attendance limited.

## Division of Hours

for the Third and Fourth Years

| | *Third Year* | *Fourth Year* |
|---|---|---|
| Dental Anatomy | 79 | |
| Fundamentals of Occlusion | 15 | |
| Genetics and Anthropology | 16 | |
| Nutrition | 16 | |
| Oral Histopathology | 77 | |
| Dental Medicine | 42 | 65 |
| Ecological Dentistry | 39 | 21 |
| Endodontics | 30 | 78 |
| Operative Dentistry | 398 | 305 |
| Oral Surgery | 76 | 96 |
| Orthodontics | 171 | 136 |
| Pediatric Dentistry | 34 | 93 |
| Periodontics | 135 | 144 |
| Prosthetic Dentistry | 649 | 494 |
| Research Project Seminars | 12 | 12 |
| Roentgenology | 8 | 19 |
| Clinical Pharmacology | | 25 |
| Surgical Anatomy of the Head and Neck | | 59 |

## DEGREES CONFERRED

On June 16, 1966 Thirteen Degrees were Conferred as Follows:

### *D.M.D.*

Hrair H Atikian, a.b. (*New York Univ.*) 1962.
Robert Edward Binder, s.b. (*Northeastern Univ.*) 1960.
Charles Raymond Bowen, a.b. (*Susquehanna Univ.*) 1962.
Lawrence Marvin Gettleman, a.b. (*Rutgers — The State Univ.*) 1962.
George David Gordon, a.b. (*Bowdoin Coll.*) 1961.
Jiles Leslie Robinson, Jr., a.b. 1962.
Carl Leonard Siegel, a.b. (*Lafayette Coll.*) 1962.
Robert Louis Stanley, a.b. (*Coll. of the Holy Cross*) 1962.

### *D.M.D. cum laude for Thesis in a Special Field*

John Mason Cotmore (*Temple Univ., 1960–62*).
Francis John Manasek, a.b. (*New York Univ.*) 1961.
Kenneth Richmond Wing, a.b. (*Wesleyan Univ.*) 1962.

### *D.M.D. cum laude*

Robert Manuel Gracia, a.b. (*Coll. of the Holy Cross*) 1962.
James Edward Mulvihill, a.b. (*Coll. of the Holy Cross*) 1962.

# SCHOOL OF DENTAL MEDICINE STUDENTS

## Fourth Year Class (1967)

‡Anapolle, Steven Eric (*Boston Univ.*) *Newton Centre*
Bailes, Charles Seiler, A.B. (*Susquehanna Univ.*) 1956. [Hahnemann Medical Coll.]. *Williamsport, Pa.*
Balaban, Stuart James, S.B. (*New York Univ.*) 1963. *New York, N.Y.*
Dick, Douglas Shelton A.B. (*Yale Univ.*) 1963. *Wellesley Hills*
Donoff, Robert Bruce, S.B. (*Brooklyn Coll. of The City Univ. of New York*) 1963. *Brooklyn, N.Y.*
‡Elias, Arthur Charles (*Brandeis Univ.*). *Westbury, N.Y.*
Goldberg, Norman Leon, A.B. (*Brandeis Univ.*) 1963. *Newton*
Hilzenrath, Stephen Sidney, A.B. (*Brandeis Univ.*) 1963. *New York, N. Y.*
Hirschman, Richard David, A.B. (*Brooklyn Coll. of The City Univ. of New York*) 1963. *Brooklyn, N.Y.*
Knoettner, Philip Val, A.B. (*Dartmouth Coll.*) 1963. *Bedford, N. H.*
Mopsik, Edward Robert, S.B. (*Queens Coll. of The City Univ. of New York*) 1963. *Forest Hills, N.Y.*
Mosadomi, Hezekiah Adeyemi, S.B. (*Mt. Union Coll.*) 1962. [Univ. of Rochester School of Medicine]. *Osogbo, Nigeria*
Perkell, Joseph Shaile, S.B. (*Massachusetts Inst. of Technology*) 1962. *Coral Gables, Fla.*
Rowan, Michael Edward, A.B. 1963. *Wellesley Hills*
‡Sande, David Lewis, (*Univ. of North Dakota*) *Grand Forks, N. Dak.*
Scharke, Clifford Craig, A.B. (*New York Univ.*) 1963. *Jamaica, N. Y.*
Söremark, Sven Arnold Rune, B.A. (*Vasteräs Coll.*) 1948. [Karolinska Institute, Royal School of Dentistry]. *Umëa, Sweden*
Super, Stuart, A.B. (*New York Univ.*) 1963. *Brooklyn, N. Y.*

## Third Year Class (1968)

Cashion, Paul David, A.B. (*Coll. of the Holy Cross*) 1964. *Roslindale*
§Dinnerman, Peter Michael (*Univ. of New Hampshire*) *Portsmouth, N. H.*

‡ Admitted on basis of three years' college work.
N.B. Where the college name is omitted, the college is Harvard; where the state is omitted, the state is Massachusetts.

‡Frank, Robert Allen (*Queens Coll. of The City Univ. of New York*) *Flushing, N. Y.*
‡Goff, Paul Henry (*Fairleigh Dickinson Univ.*) *Plainview, N. Y.*
‡Goldstein, Gary Stephen (*Univ. of Connecticut*) *Norwalk, Conn.*
Maron, Sheldon Steven, S.B. (*Boston Coll.*) 1964. *Revere*
‡Roser, Steven Malcolm (*Middlebury Coll.*) *West Newton*
Seldin, Edward Bert, S.B. (*Tufts Univ.*) 1964. *New York, N. Y.*
Shaver, Richard Odell, A.B. (*Univ. of Colorado*) 1956. [Univ. of Colorado School of Medicine]. *Denver, Colo.*
‡Trauring, Charles Maurice (*Columbia Univ.*) *New York, N. Y.*
§Walling, Marlin Worth (*Sacramento State Coll.*) *Sacramento, Calif.*

## Second Year Class (1969)

Altman, Leonard Charles, A.B. (*Univ. of Pennsylvania*) 1965. *Flushing, N.Y.*
‡Baer, Warren Sheldon (*Boston Univ.*) *Woburn*
‡Bauer, Reginald Alexander (*Univ. of California at Los Angeles*) *Los Angeles, Calif.*
‡Breyan, David Edward (*Boston Univ.*) *West Roxbury*
Evans, Bruce Eugene, A.B. (*Williams Coll.*) 1965. *Portland, Maine*
Foord, William Dennis, S.B. (*Wesleyan Univ.*) 1965. *Garden City, N.Y.*
Haddad, Raymond David, A.B. (*Univ. of New Hampshire*) 1965. *Methuen*
Hymoff, Richard Steven, A.B. (*Brandeis Univ.*) 1965. *Brookline*
Isenstadt, Lester, S.B. (*Boston Univ.*) 1964. *Cambridge*
‡Kaban, Leonard Bruce, A.B. (*Queens Coll. of The City Univ. of New York*) 1966. *Flushing, N.Y.*
Kallio, Donald Michael, A.B. (*Coll. of the Holy Cross*) 1965. *Worcester*
‡Leaf, Robert Jay (*Cornell Univ.*) *Harrison, N.Y.*
Piecuch, Joseph Francis, A.B. (*Univ. of Massachusetts*) 1965. *Indian Orchard*
‡Rothman, Kenneth Jay, A.B. (*Colgate Univ.*) 1966. *Long Beach, N.Y.*

‡ Admitted on basis of three years' college work.
§ Admitted on basis of four years' college work.
N.B. Where the college name is omitted, the college is Harvard; where the state is omitted, the state is Massachusetts.

Shay, Norbert James, Jr., S.B. (*Siena Coll.*) 1965. *Menands, N.Y.*
Weiner, Allen Lewis, A.B. (*Yeshiva Univ.*) 1965. *Winthrop*

## First Year Class (1970)

Abbatiello, Vincent Jerome, A.B. (*Cornell Univ.*) 1966. *Westbury, N.Y.*
Colchamiro, Stephen A., S.B. (*Brooklyn Coll.*) 1966. *Brooklyn, N.Y.*
Commette, James Albert, S.B. (*Coll. of the Holy Cross*) 1966. *Beverly*
Coppe, Michael Richard, A.B. (*Fordham Coll.*) 1966. *New Britain, Conn.*
Costello, John Patrick, S.B. (*Fairfield Univ.*) 1966. *Maspeth, N.Y.*
Diehl, Kenneth Robert, A.B. (*Cornell Univ.*) 1966. *Harrisburg, Pa.*
Frankel, Jerold Martin, A.B. (*Amherst Coll.*) 1966. *Atlanta, Ga.*
Krohn, Melvyn Richard, S.B. (*Brooklyn Coll.*) 1966. *Brooklyn, N.Y.*
Liebow, Charles, A.B. (*New York Univ.*) 1966. *Brooklyn, N.Y.*
Thornton Malcolm Edward, S.B. (*Fairleigh Dickinson Univ.*) 1966. *Glastonbury, Conn.*

N.B. Where the college name is omitted, the college is Harvard; where the state is omitted, the state is Massachusetts.

## Dental School Summary 1966–67

| | |
|---|---|
| Fourth Year | 18 |
| Third Year | 11 |
| Second Year | 16 |
| First Year | 10 |
| Total | 55 |

## Colleges Represented

| | |
|---|---|
| Amherst College | 1 |
| Boston College | 1 |
| Boston University | 4 |
| Brandeis University | 4 |
| Brooklyn College of The City University of New York | 4 |
| California, University of, at Los Angeles | 1 |
| Colgate University | 1 |
| Colorado, University of | 1 |
| Columbia University | 1 |
| Connecticut, University of | 1 |
| Cornell University | 3 |
| Dartmouth College | 1 |
| Fairfield University | 1 |
| Fairleigh Dickinson University | 2 |
| Fordham College | 1 |
| Harvard University | 1 |
| Holy Cross, College of the | 3 |
| Massachusetts, University of | 1 |
| Massachusetts Inst. of Technology | 1 |
| Middlebury College | 1 |
| Mt. Union College | 1 |
| New Hampshire, University of | 2 |
| New York University | 4 |
| North Dakota, University of | 1 |
| Pennsylvania, University of | 1 |
| Queens College of The City University of New York | 3 |
| Sacramento State College | 1 |
| Siena College | 1 |
| Susquehanna University | 1 |
| Tufts University | 1 |
| Vasteräs College | 1 |
| Wesleyan University | 1 |
| Williams College | 1 |
| Yale University | 1 |
| Yeshiva University | 1 |
| Total number of students | 55 |

| | |
|---|---|
| Number of colleges represented | 35 |
| Number of college graduates | 41 |
| Number of non-graduates | 14 |

## Medical Schools Represented by Students Who Entered Harvard School of Dental Medicine with Advanced Standing

| | |
|---|---|
| Colorado, University of, School of Medicine | 1 |
| Hahnemann Medical College | 1 |
| Karolinska Institute, Royal School of Dentistry | 1 |
| Rochester, University of, School of Medicine | 1 |

## PROFESSORS EMERITI

| | |
|---|---|
| Fuller Albright, M.D. | Professor of Medicine |
| Joseph C. Aub, M.D. | Professor of Research Medicine |
| Theodore L. Badger, M.D. | Clinical Professor of Medicine |
| George P. Berry, M.D. | Professor of Bacteriology |
| Grete L. Bibring, M.D. | Clinical Professor of Psychiatry |
| Herrman L. Blumgart, M.D. | Professor of Medicine |
| C. Sidney Burwell, M.D. | Samuel A. Levine Professor of Medicine |
| Allan M. Butler, M.D. | Professor of Pediatrics |
| Edward D. Churchill, M.D. | John Homans Professor of Surgery |
| Stanley Cobb, M.D. | Bullard Professor of Neuropathology |
| Edwin B. Dunphy, M.D. | Henry Willard Williams Professor of Ophthalmology at the Massachusetts Eye and Ear Infirmary |
| Jacob Fine, M.D. | Professor of Surgery |
| Cyrus H. Fiske, M.D. | Professor of Biological Chemistry |
| Felix G. Fleischner, M.D. | Clinical Professor of Radiology |
| Chester N. Frazier, M.D. | Edward Wigglesworth Professor of Dermatology |
| A. Baird Hastings, Ph.D. | Hamilton Kuhn Professor of Biological Chemistry |
| Parker Heath, M.D. | Clinical Professor of Ophthalmology |
| Ives Hendrick, M.D. | Clinical Professor of Psychiatry |
| A. LeRoy Johnson, D.M.D. | Professor of Clinical Dentistry (died January 26, 1967) |
| Chester M. Jones, M.D. | Clinical Professor of Medicine |
| Varaztad H. Kazanjian, M.D. | Professor of Plastic Surgery |
| Otto Krayer, M.D. | Gustavus Adolphus Pfeiffer Professor of Pharmacology |
| William E. Ladd, M.D. | William E. Ladd Professor of Child Surgery |
| Erich Lindemann, M.D. | Professor of Psychiatry |
| Charles C. Lund, M.D. | Clinical Professor of Surgery |

| | |
|---|---|
| Leland S. McKittrick, M.D. | Clinical Professor of Surgery |
| J. Howard Means, M.D. | Jackson Professor of Clinical Medicine |
| Philip E. Meltzer, M.D. | Clinical Professor of Otology |
| Francis C. Newton, M.D. | Clinical Professor of Surgery (died February 14, 1967) |
| Langdon Parsons, M.D. | Clinical Professor of Gynecology |
| John C. Rock, M.D. | Clinical Professor of Gynecology |
| LeRoy A. Schall, M.D. | Walter Augustus Lecompte Professor of Otology and Professor of Laryngology |
| George C. Shattuck, M.D. | Clinical Professor of Tropical Medicine |
| Richard M. Smith, M.D. | Thomas Morgan Rotch Professor of Pediatrics |
| Franklin F. Snyder, M.D. | Associate Professor of Anatomy and Obstetrics |
| Harry C. Solomon, M.D. | Professor of Psychiatry |
| Kurt H. Thoma, D.M.D. | Professor of Oral Surgery and Charles A. Brackett Professor of Oral Pathology |
| Frederick H. Verhoeff, M.D. | Professor of Ophthalmic Research |
| Shields Warren, M.D. | Professor of Pathology at the New England Deaconess Hospital |
| James C. White, M.D. | Professor of Surgery at the Massachusetts General Hospital |
| Louis Wolff, M.D. | Clinical Professor of Medicine |
| Paul I. Yakovlev, M.D. | Clinical Professor of Neuropathology |

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